

Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.

1
A881D

Reserve

U.S.-CONGRESS-SENATE-AGRICULTURE AND
FORESTRY, COMMITTEE ON.

Director-in-chief of scientific bu-
reaus. 1896,

'42

LIBRARY
OF THE
UNITED STATES
DEPARTMENT OF AGRICULTURE

Class 1

Book A881D
Reserve
346905

U. S. GOVERNMENT PRINTING OFFICE: 1927 8-1577

IN THE SENATE OF THE UNITED STATES.

MAY 13, 1896.—Ordered to be printed.

Mr. PROCTOR, from the Committee on Agriculture and Forestry, submitted the following

R E P O R T:

[To accompany S. 3131.]

The Committee on Agriculture and Forestry, to whom was referred the amendment intended to be proposed by Mr. Proctor to the bill (H. R. 5161) making appropriations for the Department of Agriculture for the fiscal year ending June 30, 1897, have had the same under consideration, and inasmuch as said bill (H. R. 5161) has already passed the Senate, the committee report as a substitute for said amendment the accompanying bill (S. —) to provide for a director-in-chief of scientific bureaus and investigations in the Department of Agriculture, and for other purposes, with the recommendation that the same do pass.

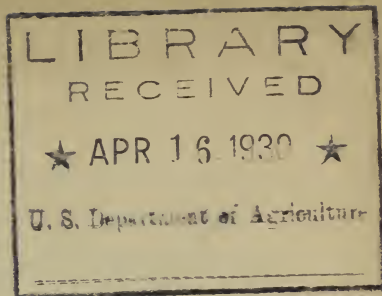
The accomplishment of the objects of the Agricultural Department is committed to a large number of bureaus and divisions that may be classed as administrative, technical, and scientific. This bill has to do with the last two classes. These classes consist of two large bureaus, the Weather Bureau and the Bureau of Animal Industry; eight divisions engaged in technical and seven divisions engaged in purely scientific work. The organization of these different bureaus and divisions more fully appears in the documents herewith published. Of the 2,019 men employed in the Agricultural Department, 993 are engaged chiefly upon scientific and technical work, and of the \$2,400,000 appropriated for the Department by the last act, \$1,700,000 was appropriated for this scientific and technical work. This shows the relative importance of these branches of the Department. Under the present system the general charge of this work has been confided to the Assistant Secretary, but for some years there has been felt the need of a permanent officer of wide scientific attainments, who should have charge of all this work. The chief consideration that makes this desirable is the necessity for permanent administration. All scientific researches are very far removed from the domain of politics and the researches of a scientific nature that are carried on by these bureaus and divisions in the Agricultural Department are often of a protracted nature and require the work of many years. It is inevitable that the progress in such work should be greatly impeded, if the practical results therefrom are not entirely prevented, by frequent changes of directors. The scientific divisions of the other Departments of the Government are provided with officers corresponding to the one contemplated by this bill, and the tenure of their offices is provided for by similar words. The result

has been that these officers have been retained in office for long periods. Such are the Coast Survey under the Treasury Department and the Geological Survey under the Department of the Interior. Therefore the legislation asked for in this bill is simply in accordance with the policy already adopted in the other Executive Departments. An officer having charge of all the scientific work in the Agricultural Department would necessarily do away with all duplication of work in the different divisions and bureaus, and would prevent the doing of work a second time. Besides this, under the present system there come frequent interruptions of a settled line of work incident to the change of administration. One director of all this work would result in better cooperation and in the better attainment of the ends of the Department.

The committee thinks it necessary that there should be the above officer besides the Assistant Secretary of Agriculture. There are many purely executive and administrative duties to be performed in the Agricultural Department and enough to require the constant attention of a capable man. It is a matter of common experience that a man who is highly versed in scientific matters is very liable to be wanting in the best administrative ability. The requirements for the discharge of these administrative duties are very diverse from the requirements necessary for a successful supervision of scientific researches. There would be great difficulty in finding a man who could meet both these requirements in the best degree. Besides this, the combined administrative and scientific duties in the Agricultural Department are too many and diverse to be well performed by any one man, however efficient. There are published herewith the hearing before the committee and many letters which contain the considerations pointing to the wisdom of the changes contemplated.

1
Ag 81 D

346905



DIRECTOR-IN-CHIEF OF SCIENTIFIC BUREAUS.

ARGUMENTS

BEFORE THE

COMMITTEE ON AGRICULTURE AND FORESTRY,

UNITED STATES SENATE,

IN FAVOR OF THE PROPOSITION FOR A DIRECTOR-IN-CHIEF OF SCIENTIFIC
BUREAUS, IN THE DEPARTMENT OF AGRICULTURE.

~~157~~
WEDNESDAY, March 4, 1896.

The Committee on Agriculture and Forestry met at 11 o'clock a. m.
Present: Senators Proctor (chairman), Hansbrough, Warren, Gear,
George, Bate, Roach, and Irby.

Hon. Gardiner G. Hubbard, of the city of Washington; Gen. George
M. Sternberg, Surgeon-General United States Army, and Hon. Charles
W. Dabney, Assistant Secretary of Agriculture, appeared.

The CHAIRMAN (Senator Proctor). Mr. Gardiner G. Hubbard,
whom you all know, I presume, would like to be heard on the subject
of the amendment intended to be proposed to the Agricultural appro-
priation bill, to insert the following:

Director-in-chief of scientific bureaus and investigations, to serve during good
behavior, to have the authority to act as Assistant Secretary, and to perform such
other duties as the Secretary may direct, \$6,000.

The subject was brought before Congress by the following letter
from the Secretary of Agriculture:

UNITED STATES DEPARTMENT OF AGRICULTURE,
OFFICE OF THE SECRETARY,
Washington, D. C., February 11, 1896.

*The Chairmen Committee on Agriculture, United States House of Representatives,
and Committee on Appropriations, United States Senate.*

SIR: After mature deliberation and conference with gentlemen who have made
the scientific work of this Department a special study, I am convinced that it is
my duty to ask Congress to provide in the pending appropriation bill for a director-
in-chief of scientific divisions, who shall be charged with the supervision of the
very important, comprehensive, and constantly growing scientific work done in
the Department of Agriculture.

The Department of Agriculture has for its object the discovery, exploration,
development, conservation, and proper utilization of the agricultural and other
natural resources of our country. This is accomplished through various agencies,
which are classified as either purely scientific or technical, or simply business,
administrative, or educational agencies. These agencies are organized in the
Department under two large bureaus and a number of divisions and offices.

The Weather Bureau includes 3 executive or business offices, 6 technical divi-
sions, and 5 scientific experts engaged in research, besides 154 technical observing
stations and 54 principal signal stations along the coast and on the Great Lakes.
The Bureau of Animal Industry includes 2 administrative offices, 152 technical
stations or agencies engaged in meat inspection, quarantine work, etc., and 3 lab-
oratories for scientific investigations. Of the remaining divisions in the Depart-
ment, 7 are engaged in administrative business, publishing and distributing infor-
mation, and educating the people; 8 are classed as technical, and 7 are chiefly
engaged in purely scientific investigations or surveys of the country's resources.
For the details of the organization of the Department and the duties of these
bureaus and divisions you are referred to the accompanying table.

An analysis of the last act shows that of the \$2,400,000 appropriated for the
Department of Agriculture, over \$1,700,000, or over 70 per cent, was given for this
scientific and technical work, as distinguished from the administrative or general
work of this institution. A canvass of the rolls of the Department shows that
993 out of a total of 2,019 employees are engaged chiefly upon scientific and tech-
nical work.

It would seem a simple business proposition, needing no argument to support it,
that the vastly important and comprehensive work described in the law, promot-
ing, as it does, the development of almost every resource of our land and every
industry of our people, our production at home and our markets abroad, and con-
cerning even the food and health of a large part of our population, for which

\$1,700,000 are annually expended, and in which nearly 1,000 scientific and technical experts are engaged, should have a permanent, broadly educated, and experienced scientific director or superintendent.

No permanent and adequate direction and supervision is provided in the present organization of the Department. It is not to be supposed that the Secretary of Agriculture, a member of the President's Cabinet, even if a farmer and an experienced executive, will always be a technically trained scientific man. Even if he should be, he occupies the position only four years, and thus scarcely becomes familiar with the difficult and complex work of the Department before he leaves it. The Assistant Secretary of Agriculture is subject to the same conditions. Because he must represent the Secretary in the Administration, he must go with the Administration. These conditions, which are necessary and inherent in our system of government, it is not proposed to change. A Secretary and an Assistant Secretary are both needed. But another permanent officer is needed to direct the work of the various scientific bureaus of the Department, under the general authority of the Secretary.

In order to accomplish the best and most permanent results, this Department must have a permanent policy with regard to all its scientific work. This Department has less relation to the general executive business of the Government and less connection with what is usually called "politics" than any other Department of the Government. In fact, the scientific work of the great bureaus, divisions, and surveys above referred to should be kept free from politics to be efficient and impartial to the interests of all. The numerous bureaus and divisions do not have under the present organization—in fact, can not have—the attention and direction which the interests involved demand. With the change of Administration the Department is practically headless, and, to a great extent, helpless, until the new Secretaries have had time to master the details of its technical work. Such a director of scientific divisions is needed therefore, if for nothing else, to carry on the scientific work of the Department from one Administration to the next.

Is it conceivable that any great manufacturing, railroad, or mining company undertaking such difficult scientific work and using so much money and so many men would provide for it no permanent scientific direction or supervision whatever, and then change all the heads every four years, leaving the work practically at a standstill, or, what is worse, entirely without direction or supervision from six months to a year in every four? The change of Administration affects the work of this Department even more than it does that of others, because its work is less of a routine character, is more progressive, and thus requires constant direction to keep it usefully going. The bureaus and divisions of this Department can not do practically the same thing year after year, as they do in the great business Departments of the Government, but must, if they serve the people properly, do a new and different thing almost every month in every year. They therefore need constant assistance and supervision from a general executive much more than do the divisions of other Departments.

Aside from these special considerations with regard to the scientific work, the Department of Agriculture greatly needs another general executive officer. It has only two Secretaries authorized to take any official action. There is no provision in the laws for any officer of the Department to act in case of the absence of the two Secretaries, as there is in some of the other Departments. Either the Secretary or the Assistant Secretary has to be present at the Department every day and every official hour during the year.

The bureaus and divisions in Washington are, contrary to the popular idea, much the smaller part of the Department of Agriculture. Outside of Washington there are 154 observing stations and 52 signal stations of the Weather Bureau. There are 100 meat-inspection stations in 40 different cities and towns in the country; 21 different quarantine stations for import cattle at points on the coast and on the Canadian and Mexican boundaries; 9 different stations for inspecting export stock, and 19 for inspecting stock for Texas fever, making a total of about 150 stations in the Bureau of Animal Industry, which should have inspection and supervision occasionally by the highest authority of the Department. The agricultural experiment stations, located in different States and Territories, and several special experiment stations of the Department of Agriculture are supposed to receive the supervision of the Department. In addition to these agencies, the Department has many others for studying soils, foods, and food dietaries, testing timbers, and collecting material illustrating our natural resources, scattered all over the country. The Secretaries or directors should be in position to visit and examine the work of these various agencies for the purpose of informing themselves as to their uses and needs, in view of the great amount of business done and of the large number of branches of the Department scattered all over the country.

Another executive officer is greatly needed in order to permit a better distribution of work and a more regular and thorough supervision of the outlined branches of the Department. The new officer here asked for should therefore be authorized to act, when called upon by the Secretary, as a Second Assistant Secretary.

The salary attached to the position should be sufficient to secure the services of a broadly educated scientific man who has had the necessary experience in the administration of affairs and the direction of scientific work, and should be equal to that paid for similar services in other branches of the Government.

I therefore respectfully recommend that you insert after line 11, page 1, of the bill making appropriation for the Department of Agriculture for the fiscal year ending June 30, 1897 (H. R. 5161), the words:

"Director in chief of scientific bureaus and investigations, to serve during good behavior, to have the authority to act as Assistant Secretary, and to perform such other duties as the Secretary may direct, \$6,000."

Respectfully submitted.

J. STERLING MORTON, *Secretary*.

ARGUMENT OF MR. GARDINER G. HUBBARD.

Mr. HUBBARD. Mr. Chairman and gentlemen, our object is to establish a permanent officer in charge of the sixteen different scientific bureaus in connection with the Agricultural Department. I am not a scientist myself, and know little about science. However, I have been connected for nearly ten years with the National Geographic Society, and for the last six years with an association of the seven scientific societies of Washington, called the joint commission, and its president since its reorganization. The seven societies have a membership of about 2,000. They have had this matter under consideration and have passed a series of resolutions, two or three extracts from which I will read, which will bring the matter distinctly before the committee:

Whereas the work of the Department of Agriculture in the discovery, exploration, development, conservation, and proper utilization of the resources of our country is of the utmost importance; and whereas the Department's capacity for originating, procuring, and disseminating knowledge of vital importance to farming and other interests, though already large, is capable of much extension in the future; and whereas the results accomplished through the system now in existence have been exceedingly great, and the one thing above all others necessary to increase the efficiency of this organization is a permanent policy with regard to its work and personnel:

Resolved, That the Joint Commission of the Scientific Societies of Washington, composed of the officers of the several scientific societies of the city, comprising in all a membership of nearly 2,000, heartily approves the proposition to create the office of "director-in-chief of scientific divisions in the Department of Agriculture," to be filled by a broadly educated and experienced scientific administrative officer, holding office during good behavior.

Resolved, That the plan of having a permanent officer in charge of the scientific and technical work under the executive head of a Department represents a distinct advance in good government, and is therefore not only of national importance, but if carried out certain to have a beneficial effect upon the scientific standing of Government work in all its relations.

The scientists of Washington are very numerous, and those under the Department of Agriculture number about 1,000.

Senator GEORGE. Do you mean employed by the Agricultural Department?

Mr. HUBBARD. Yes, sir.

Senator GEAR. That includes those employed all over the country?

Mr. HUBBARD. They are scattered in various places.

Senator GEAR. There are six or seven hundred outside of the particular Department, and scattered over the country.

Mr. HUBBARD. There is, I believe, no place in the world where so many scientists are collected together as in Washington, with the

possible exception of Paris. Neither are there any who stand higher or have done more for science than the scientists of this city. The Weather Bureau is one of those wonderful organizations started under the direction of our Government which has now spread all over the world. The work of the Coast Survey is known to all. In the Treasury, in the Interior, and in the Agricultural Departments there are scientific bureaus of one kind or another.

Senator GEORGE. You astonish me by stating that there are more scientists in Washington than anywhere else in the world unless in Paris. Can you give a general statement of what department of science these men occupy?

Mr. HUBBARD. As I go along I can give you some idea on that point.

Senator GEORGE. All right.

Mr. HUBBARD. The different Departments have scientific bureaus, and all these bureaus, with the exception of the Agricultural Department, are managed by a director in chief, or some person holding a title equivalent, and although not appointed for life or for good behavior, yet they are appointed indefinitely, and almost invariably hold office for a series of years.

Senator GEORGE. But all are removable at the will of the appointing power?

Mr. HUBBARD. They are; but, practically speaking, they never have been removed.

Senator WARREN. May I ask a question?

Mr. HUBBARD. Certainly.

Senator WARREN. In creating this proposed office would it not be well to rest upon a precedent rather than to make it exceptional?

Mr. HUBBARD. I think it would be better.

Senator GEAR. You stated that they have not been removed.

Mr. HUBBARD. Yes, sir.

Senator GEAR. Virtually some of them have been removed.

Senator WARREN. You mean, I suppose, that they have not been removed by the head of the Department.

Mr. HUBBARD. They have not been removed by the head of the Department or for cause either.

Senator GEAR. You mean to say that politics has not had anything to do with it?

Mr. HUBBARD. I mean to say that, as a rule, the appointments have been so good that these persons have remained in office as long as they wanted to hold the office, or until their death, and that politics has had nothing to do with the appointments. The first to which I shall allude is the Fish Commission, now without any head.

Senator GEORGE. Mr. McDonald is dead.

Mr. HUBBARD. He died a short time ago. The law requires that the Director shall be a person skilled in the knowledge of fish and of the fish industries of the country.

The next to which I will refer is the Coast Survey. The Coast Survey employs 200 or 300 men in its service, and has at its head a Superintendent. Connected with it is the Light-House Board. It has also had charge of the surveys of our boundaries, both the northeastern boundary of Maine at different times, the Alaska boundary, and the Mexican.

Senator WARREN. Do you happen to remember the salary of the Superintendent?

Mr. HUBBARD. The salary of the Superintendent of the Coast Survey is \$6,000.

Senator BATE. In this connection will you state the salary of the gentlemen of whom you speak?

Mr. HUBBARD. The salary of the Fish Commissioner is \$6,000.

Senator WARREN. It is something less than that of the Superintendent of the Coast Survey.

Senator GEORGE. The Official Register will show.

Senator WARREN. I do not know of any such salary that is as high as \$6,000 except this one, although there may be others.

Mr. HUBBARD. The salary of the Superintendent of the Coast Survey is \$6,000, and the salary of the Director of the Geological Survey is \$6,000. There are in the different Departments bureaus all having one head. The next to which I shall refer is the Smithsonian. Its Secretary has all the powers of the Director of the other bureaus. He also has a salary of \$6,000 a year.

Senator BATE. Some of them, as the surveyors, have to pay their traveling expenses out of that salary?

Mr. HUBBARD. The Coast Survey would not have any salary left if they had to pay their traveling expenses.

Senator BATE. Are their necessary expenses paid outside of that salary?

Mr. HUBBARD. Yes, sir.

The CHAIRMAN. All their expenses when away from Washington are paid.

Senator WARREN. The salary of the Superintendent of the Coast Survey did not use to be so high.

Speaking of the Revised Statutes as to salaries, I will state that the Revised Statutes provide that the governors of the Territories shall receive a salary of \$3,500 a year, and Congress has appropriated \$2,600 right along.

Senator BATE. That creates an obligation on the part of the Government to pay the salary provided by law.

Senator WARREN. But it is not so considered, because it is claimed that the appropriation act repeals the clause of the preceding statute.

Senator GEAR. There is a claim pending now of the commissioners of Utah, whose salary was fixed at \$5,000, and I think the last Congress appropriated but \$4,000.

Mr. HUBBARD. I am here in behalf of the joint commission. They do not ask that any particular salary shall be fixed. They are not so much interested in the amount of the salary as that there shall be a director appointed who shall not be removable at the expiration of the Presidential term, as the present Assistant Secretary is.

Senator WARREN. So that all the work may center through one man?

Mr. HUBBARD. So that all the work may center through one man. That is what I am here to advocate, not the question of salary. I also wish to notice the various kinds of business and the different bureaus that come under the superintendence of the directors of the different Departments. For instance, the Secretary of the Smithsonian has the Museum, the Bureau of Ethnology, the distribution of the scientific publications of the various bureaus and of scientific societies all over the world, the Zoological Park, and the Astrophysical Observatory.

In addition to that there is provision for lectures, a library, and an art gallery. The Smithsonian will have its fiftieth anniversary during the ensuing fall. It has had but three Secretaries in that time: Professor Henry, from 1847 to 1878; Professor Baird as Assistant Secretary twenty-eight years, and then as Secretary from 1878 to

1887. Professor Langley was appointed as his successor. The Coast Survey is under the Treasury Department.

Senator GEAR. Was not the chief of the Coast Survey changed a short time ago?

Mr. HUBBARD. Yes, sir; its Superintendent was changed.

Senator GEAR. Mr. Mendenhall was its Superintendent?

Mr. HUBBARD. Mr. Mendenhall was its Superintendent. He held his position for several months after he had sent in his resignation to give the President time to find a suitable person as his successor.

Senator BATE. He resigned on his own motion?

Mr. HUBBARD. Yes, sir; he resigned on his own motion.

Senator GEORGE. Was he getting \$6,000 a year?

Mr. HUBBARD. Yes, sir.

The CHAIRMAN. I think the salary has been reduced and that it is now \$5,000.

Senator WARREN. My impression is that the appropriation acts have cut down the salary as fixed by statute, which is not an unusual thing. As I remarked before, ten or fifteen years ago the salary of the governors of Territories was fixed at \$3,500, and Congress has been appropriating \$2,600 instead, so Mr. Hubbard could easily fall into an error in regard to the salary of the Superintendent of the Coast Survey.

Mr. HUBBARD. Next we come to the Interior Department, which has under its charge the Geological Survey, the largest work of the kind in this country, and probably in the world, and having a large number under its direction. The salary of the Director is, as I understand it, \$6,000.

The CHAIRMAN. I think that has also been reduced.

Senator BATE. That has been reduced.

Senator GEORGE. They all ought to be reduced, I will say.

Senator WARREN. I do not know of one of these men who is getting over \$5,000.

Senator GEAR. I do not think \$5,000, or \$6,000 either, a very big salary for a man of scientific attainments.

Senator WARREN. That is right; but the trouble is that it is out of range with other Government salaries, that is all.

Senator GEORGE. It is especially out of range with the compensation of the farmers of this country.

Senator GEAR. That is true, but when a man devotes a lifetime to fit himself for such a position you can not expect him to work on a salary of \$100 a year.

The CHAIRMAN. Mr. Hubbard, you will proceed.

Mr. HUBBARD. The Geological Survey has been a training school for the universities of this country. There are few universities that have furnished more professors to the various colleges and universities than the Geological Survey. A number have gone from here to the Chicago University, receiving much larger salaries there than here. Professor Mendenhall went to the Polytechnic Institute at Worcester; the Chief of the Weather Bureau to the presidency of the Washington University, and one from the Geological Survey is now professor in the University of Michigan. I think every one of those gentlemen is receiving a higher salary than he received from the Government.

The Geological Survey since its organization in 1878 has had three Directors; Clarence King, the first year; Major Powell, from 1879 to 1894, and Mr. Walcott, the present Director. The Director has in his

charge, first, the geology of the country; second, the topographical or geographic Bureau; third, the map Bureau; fourth, the Bureau of the arid region and irrigation.

Last, we come to the Department of Agriculture, which has a larger number of bureaus than either of the other Departments. It has sixteen different bureaus under it. The civil service has been introduced into this Department and into the Interior Department under the present Secretaries, to the great benefit of the Department of Agriculture and to the several bureaus. All that the Agricultural Department needs at the present time is some person at the head of these sixteen different bureaus who shall preside over them and be able to unify and carry out the system of each.

The CHAIRMAN. The Secretary of the Smithsonian is paid from some other fund, is he not?

Senator GEORGE. From the bequest, I understand.

Mr. HUBBARD. From the Smithsonian bequest.

The CHAIRMAN. It is entered here, "Compensation, none," to Professor Langley.

Mr. HUBBARD. Professor Langley has a salary of \$6,000. That comes from the Smithsonian fund.

Senator BATE. How much does that document show that the Government gives him?

The CHAIRMAN. Nothing. The assistant has——

Mr. HUBBARD. Three thousand dollars, I think.

The CHAIRMAN. He receives \$4,000; \$333.33 a month.

Mr. HUBBARD. We see, therefore, gentlemen, that all the scientific bureaus, excepting those of the Agricultural Department, are managed by a director or its equivalent. Such is the case with the Fish Commission, the Coast Survey, the Smithsonian, and the Geological Survey. We are not asking, therefore, for anything new, but simply that you carry out the design of the Government and appoint a director in the Agricultural Department.

Senator GEAR. Is the gentleman whom it is proposed to have fill this office in the Department now in any capacity, or do you not know?

Mr. HUBBARD. No; I do not know. It was supposed that the Assistant Secretary could do this work, but it has been found impossible and another officer is needed. The Assistant Secretary is as able a man as could be found anywhere in the country. There are only two objections that I know of against him. One is that he is a Southerner and the other is that he is a Democrat.

Senator GEORGE. Two very good objections.

Senator GEAR. Who is the gentleman?

Mr. HUBBARD. Mr. Dabney. He is here, sir. I do not believe that any Department could be run better than the Agricultural Department is at the present time, with some very few exceptions.

The CHAIRMAN. Have you anything further to say?

Mr. HUBBARD. Nothing further.

ARGUMENT OF SURG. GEN. GEORGE M. STERNBERG.

Surgeon-General STERNBERG. Gentlemen, I came here at the request of Mr. Hubbard. After what he has said to you it is not worth while for me to take very much of your time. I was present at the meeting of the executive committee of the joint commission of the scientific societies, representing the Biological Society, of which I am presi-

dent, when the suggestion was made that we should take some action with reference to this proposition. The executive committee is composed of the presidents of the several scientific societies. We have the Anthropological Society, the Biological Society, the Chemical Society, the Philosophical Society, the Entomological Society, the Geological Society, and the National Geographic Society. It was the unanimous opinion of the presidents of these societies, who constitute this executive committee, that this is a move in the right direction and that it ought to receive our hearty support. The resolutions of the joint scientific societies of Washington are submitted herewith.

I may say, apropos of the last remarks of Mr. Hubbard, it was stated at that time that this is not a move in behalf of any particular man. The present very efficient Assistant Secretary has made a record for himself. He is well known as a scientific man; and he spent several years in Germany in prosecuting his studies. He has been connected with agricultural colleges, and was president of an institution when he reluctantly came here. He did not seek the place; the place sought him. But we were informed that he is not a candidate for this place. The question as to who is to be appointed is entirely outside of our intention.

I may remark that in the Army we have scientific branches, scientific bureaus. We have the Ordnance Department and the Engineer Department. Think what would happen if the chiefs of those departments were taken out every four years and novices were placed there to experiment upon powder and guns, or if in the Engineer Department the best methods of seacoast defense depended upon some man, however intelligent, who had to be instructed as to what had been done by his predecessors.

Senator GEAR. The gentlemen whom you speak of as being skilled in these departments are Regular Army officers, are they not?

Surgeon-General STERNBERG. Yes, sir.

Senator GEAR. Is it not fair to suppose that right below them in rank there are men who are equally adapted for promotion?

Surgeon-General STERNBERG. Certainly.

Senator GEAR. To take the place of the man at the head, if he should happen to drop out?

Surgeon-General STERNBERG. Certainly; I am only speaking of what would happen if somebody outside, unfamiliar with the service, were to be appointed and placed in charge of that work. I think it is about the same in the case of the Agricultural Department. A man unfamiliar with what has been done, unfamiliar with the intentions of his predecessor and what the most promising lines of work may be, comes in there and an immense administrative work is thrown upon him at once. If he is not a scientific man, if he is not familiar with what has been done and with the methods of science in the various bureaus, there are some enterprising scientific men who think their particular work is what ought to be encouraged, and if they get his ear they may succeed in getting work done that is not very profitable, while the more modest man, perhaps, who has been working for years, is left out, because his work is not appreciated. It is evident that we want somebody at the head of this work who shall have a general knowledge of the methods and who shall hold a permanent position.

I do not see that there is any call for an extended argument on this subject further than has already been made. In reading the circular which has been placed before you my attention has been attracted by a letter from Seth Low, president of Columbia College, which I hope

you will read, and which I think covers the ground very thoroughly. I will read a little of it:

From the nature of the case, scientific work is as far as possible removed from the sphere of politics. Permanency in the direction of it is essential to the accomplishment of the best results.

I may say it is a fact known to the scientific men of this District that in these different bureaus not infrequently the earnest men working in their own particular field and following up a certain line of investigation, thinking that that is the thing and wanting to hold on to it, are doing duplicate work, while there is another man in another bureau who is following the same work, and there has been a certain amount of duplication of work. All that would be regulated by the scientific chief. Then you want a scientific judgment as to the value of the work. No doubt work is often done that is not very promising. Young men come into the Department, full of enthusiasm perhaps, who go on doing work such as has already been done, and well done, elsewhere; done at the agricultural colleges or done abroad. A scientific man will look carefully over and consider this matter and consult his library and find out just what has been done before, and he will encourage such work as needs encouragement. So that on the score of economy I think it may be safely recommended. As stated by Seth Low, it should be done—

Because only by permanency can the oversight and direction of a man of the highest standard be secured.

Now, permit me to say one word about the salary. Only on a decent salary can a man of the highest value be secured. Men such as you want are wanted at the colleges and universities, which pay fair salaries nowadays, and they are going to pay better. Suppose, for instance, we found just the man we wanted at the Johns Hopkins University, a professor there. You would not tempt him with a salary of \$5,000.

Senator GEORGE. We get plenty of them here at \$5,000 who would have some sense.

Surgeon-General STERNBERG. But you can not get a man to leave his position at the Johns Hopkins University for that sum.

Senator GEORGE. All the district judges of the United States get \$5,000, and they are supposed to have some sense.

Surgeon-General STERNBERG. That is all very true; I am not insisting upon any sum, but I doubt whether men of the highest scientific attainments could be procured for \$5,000 a year. You do not get presidents of railroads for \$5,000.

Senator GEORGE. No; they can grab more out of the public in their position.

Surgeon-General STERNBERG. It is a question of demand and supply. It may be that a competent man can be gotten for \$5,000, but I do not think any man of family can come to the city of Washington—and I think most gentlemen present will bear me out in that—and live on much less than \$5,000, and live decently.

Senator GEORGE. It depends on how he lives. If he drinks champagne, and leads that sort of a life, he can not do it.

Surgeon-General STERNBERG. That is a question, of course, which I do not propose to enter upon. It occurs to me if any members of Congress come here with nothing but their salary to live on it must be pretty hard work, and that they might do something for themselves in that direction. The second reason that Seth Low gives is the following:

Because very many scientific investigations have to be maintained for a series of years before they yield trustworthy results.

That is a very important point. Here a work has been going on for some years and only little progress has been made, but they see a promise for the future that may be of the utmost value to the farming interests. Some novice comes in and says, "What have you been doing here? What are the results?" And he puts his foot down upon it. He says, "I do not believe in that," and he stops it at once, just when it is probably reaching the most promising stage of development.

Speaking as an administrator, I should take it for granted that such an officer appointed on a permanent tenure during good behavior would save to the Government many times his salary every year in administrative expenses, while he would multiply very greatly the efficiency of all bureaus placed under his care.

I fully concur with the president of Columbia College in that statement, and I really do not think I could add anything more to the subject.

ARGUMENT OF ASSISTANT SECRETARY CHARLES W. DABNEY.

Assistant Secretary DABNEY. Mr. Chairman and gentlemen, Mr. Hubbard has asked me to come here.

Mr. HUBBARD. Before you begin, I should like to state to the committee that the Secretary of Agriculture told me in regard to the appointment of Mr. Dabney that he was looking around for a suitable person and some one mentioned to him Mr. Dabney; that he did not see Mr. Dabney; that there was not a single letter on file recommending him, but it was only from inquiry made by himself personally and by the President that they decided upon Mr. Dabney as a suitable person for the position. I think the first knowledge Mr. Dabney had of it was the notice that he had been appointed as the Assistant Secretary of Agriculture.

Senator BATE. I know something about that. He comes from my State. Other men were being pressed for the position at the time, but the President sent for me and asked me about Mr. Dabney.

Assistant Secretary DABNEY. I am much obliged to my friend for his kind reference to me. I do not think there is any personal matter in this proposition at all. I believe everyone now understands that.

I was invited by Mr. Hubbard to come here to speak in regard to this matter, and I have the permission of the Secretary of Agriculture to do so, so that under the circumstances I speak for both. I wish briefly to give you the position of the Department and of the Secretary with regard to this matter.

This is not a new move. It commenced under the last Administration. At the beginning of Mr. Harrison's Administration the scientific men of the Department and their friends in Washington commenced to agitate this matter for the reasons that Mr. Hubbard has so well stated to you. They had learned the necessity of a permanent director over them to coordinate and unify their work and direct them in their operations.

The movement at that time took a different form from the one presented to you at the present time. It was suggested—I do not know by whom, but by some of the leading scientific men of the country—that an effort should be made to make the Assistant Secretary in the Department of Agriculture a permanent officer. The suggestion was, I am told, taken to President Harrison and very favorably considered by him, with the result that he invited one after another, two that I

know of, of the most eminent scientific men in the country to take the place, assuring them that he would do all he could to make it a permanent place.

They were not politicians in any sense of the word. They were very eminent men, eminent in agricultural science, and he felt sure that if such a man would take the place the very fact that he accepted it would remove all politics from it, and would show the country and all future Administrations that the man so appointed deserved to stay there. An eminent gentleman from one of the Eastern colleges was first selected by President Harrison. He thought enough of it to come down here and look the field over. He saw the President and Secretary Rusk, and considered all the bearings of the matter for the purpose of seeing whether, in case he accepted it, he could make it a permanent place.

He had an excellent place at an Eastern college, and he did not like to leave that and come here and serve three or four years, and then be turned out, of course. He decided that the scheme to make the Assistant Secretary a permanent officer would not work; that the Secretary, changing with each Administration, and a political advisor of the President, should always have a gentleman of his own faith to represent him in his absence and to advise him during his presence, and that it was therefore impracticable to make permanent the regular Assistant Secretary of the Department. The gentlemen in the Department were very much disappointed at this, and they made an effort to secure another distinguished man from the Pacific Coast. When he declined also, that scheme was abandoned, and an Assistant Secretary was appointed under the old plan—that is, with the understanding that he would change with the Administration.

So the matter rested until the present Secretary came in, and he, seeing the necessity of the case, made an effort, as the gentlemen have explained to you here, to fill the requirements by getting a man who was not a politician, who, as it happened, did not seek the office, to fill the place of Assistant Secretary, but with the distinct understanding, of course, that it was the old office. Although it was done in that way, if you will allow me I will state that I have tried to fulfill the requirements of the position and take care of the scientific work as best I could, but with no other idea in the world than that I represent the Administration, and expect to go with it.

Mr. HUBBARD. A year hence.

Assistant Secretary DABNEY. A year hence, of course. The plan was revived last fall, about the beginning of the present session of Congress, and the scientific men of the country commenced pressing it upon the attention of the Secretary again that he should do something in order to establish this position. The Secretary asked me to take the matter under consideration, and to confer with them and to formulate a plan, the result of which was that the scientific men of the Department conferred with the scientific gentlemen here in Washington and all over the country. One gentleman went up to New England to get the views of the eminent professor who had declined the place under President Harrison and to find out exactly why he thought the plan to make the office of Assistant Secretary permanent would not work. The result of it all was that they arrived at the conclusion, which everybody seems to accept as the true one, that since it is impracticable to make the only Assistant Secretary in the Department a permanent officer, there should be, as there is in the other Departments, a director, an additional officer under the authority of the two Secretaries and next

to them, and having in their absence the right to act as Secretary. So that is the plan now before you.

The Secretary of Agriculture took it up as suggested by these gentlemen and recommended it in a letter to your committee, with the express understanding or belief that nothing would be done in regard to the matter at the present session. We know, of course, that it is not the custom to create such offices under present circumstances; there is too much politics in the air at this session, as at every session preceding a Presidential election. But the scientific gentlemen interested, believing that it would be too late to begin the move next session, it being a short session, desired very earnestly that the Secretary of Agriculture put in his recommendation, have the matter considered, have it talked about over the country and considered by scientific men, so that if possible they might get a favorable report from your committee, which could then be laid before Congress at the next session.

I hope I have made it perfectly clear that the scheme originated with the scientific men of the country and of Washington. The present Secretary of Agriculture does not seek anything at all, but he is simply acting at the instance of the scientific men of the country with the hope that you will give these gentlemen a favorable report, and that Congress will at the next session provide for this office to be filled some time in the summer of 1897. It certainly could not be done before. It was with this express understanding, let me say, that we asked these gentlemen not to come before you and not to bring this matter up until the Agricultural appropriation bill had been passed through both Houses; and it passed the Senate yesterday.

We sincerely agree with them, after considering the matter, that this officer is needed in the Department of Agriculture. We desire to do everything we can to secure him in the future for the direction of this work, and we are going to aid them in every way possible to cultivate the scientific opinion of the country and get the good will of the scientific men, and through them your good will and support for this measure. What we earnestly request now is that you will consider the matter and make a favorable report, to be taken up at the next session, and if you will do that I will say that the Secretary would be very glad to put this salary in his estimates for 1897-98. But he does not care to do it unless it meets with the approval of the scientific men of the country first and of your committee next.

Senator GEORGE. The matter is not so urgent but that you can get along without it for twelve months?

Assistant Secretary DABNEY. Oh, of course not.

Senator BATE. This is a mere educational campaign?

Assistant Secretary DABNEY. Precisely.

A great many letters have been sent in to the committee in regard to this matter, and the chairman of the committee was kind enough to send the Secretary the letters and ask him for his opinion and comments. These letters contain suggestions in regard to the best way to provide for this officer. In response thereto the Secretary wrote the following letter to the chairman of your committee:

UNITED STATES DEPARTMENT OF AGRICULTURE,
OFFICE OF THE SECRETARY,
Washington, D. C., March 3, 1896.

DEAR SIR: I have the honor to acknowledge the receipt of your letter of February 19, inclosing an amendment to H. R. 5161, inserting the following: "Director-in-chief of scientific bureaus and investigations, to serve during good

behavior, to have the authority to act as Assistant Secretary, and to perform such other duties as the Secretary may direct, \$6,000," and asking for my opinion and comments thereon. I have also received, through your courtesy, a number of memorials and letters from scientific men throughout the country with regard to this matter, and am much pleased to find that they uniformly approve of the purpose of the amendment. There is some slight difference as to the method of accomplishing the end in view, but none whatever as to the desirability of this new officer.

The words "to serve during good behavior" appear to have a technical meaning different from their ordinary meaning, and are, therefore, objected to by some. In the sense in which they are applied to the Supreme Court, for example, these words mean that the tenure of office is for life and the officer can not be removed except by impeachment proceedings. Ex-Senator Edmunds states this point with force in a letter inclosed with those herewith returned. The object aimed at by these words is evidently to obtain reasonable security for this officer during good behavior, or at least recognition of the fact that he should not be changed with every Administration. It is suggested that this object might be secured by inserting, in lieu of the words "to serve during good behavior," the words "who shall be a person of suitable scientific attainments and executive experience, to be appointed by the President, by and with the consent of the Senate."

The remainder of the amendment appears to be without objection from any source. It is very necessary that this officer have the authority at times to act as Assistant Secretary, since in the absence of the Secretary and the present Assistant Secretary there is no other officer at the Department appointed by the President by and with the consent of the Senate, and thus eligible to act in this capacity. The only other officer thus appointed is the Chief of the Weather Bureau, whose office is located in a remote section of the city. With the above amendment fixing the method of appointment by the President, the President could in case of emergency designate this new officer to act as Assistant Secretary.

All of these matters are, however, best left to the wisdom of the committees which will be called upon to consider the matter. I respectfully ask your earnest consideration for the various communications from the scientific men and institutions of the country and believe that you will find a fitting method and time in which to provide the needed officer. In order that the communications of these distinguished gentlemen may have the consideration that they deserve, I respectfully request that they be published with the report of your committee.

Very respectfully,

J. STERLING MORTON, *Secretary.*

Hon. REDFIELD PROCTOR,

Chairman Committee on Agriculture and Forestry, United States Senate.

(For inclosures, etc., see Appendix.)

Senator GEAR. Has not the President the right by virtue of his office to designate any person to act as Secretary in the absence of the Secretary of Agriculture?

Assistant Secretary DABNEY. Only a person appointed by and with the advice and consent of the Senate.

Senator GEAR. I mean within those bounds?

Assistant Secretary DABNEY. But there is no other officer in the Department.

The CHAIRMAN. There is only one Assistant Secretary in the Department.

Senator GEAR. It is the only Department with but one Assistant Secretary. All the other Departments have other officers appointed by the President.

Assistant Secretary DABNEY. All the others have. In looking over these letters I find that every one approves the purpose of the amendment. The only difference is as to the matter of accomplishing the end in view, and the chief difference on that point is the criticism made by ex-Senator Edmunds which is that to serve "during good behavior" is impracticable, and he suggests as a modification that he should hold office during the pleasure of the President, or for six years, and removable for inability or misconduct, on written accusation and hearing.

There is one other letter which I will take the liberty of calling to your attention, and that was received yesterday, too late for publication. It is from Dr. Edwin Willits, Assistant Secretary of Agriculture under Secretary Rusk. It is as follows:

WASHINGTON, D. C., *March 3, 1896.*

DEAR SIR: I note by the papers that you have recommended to Congress the appointment of a director-in-chief of scientific bureaus and investigations in your Department, to be appointed by the President, by and with the consent of Congress, and to perform the duties of Assistant Secretary when so designated by the Secretary.

I write to say that I am in hearty accord with the recommendation indicated. While I was Assistant Secretary I made to Secretary Rusk a similar recommendation. Under the existing law I was put especially in charge by the Secretary of the scientific work of the Department. I had been in charge but a short time when I felt that the duties for that alone were sufficient for all the energies and executive ability of one man, and that coupling it with the general duties as Assistant Secretary made more than any one man could do well in either branch. The regular Assistant Secretary is charged with many executive and semiexecutive matters foreign to the scientific work. His correspondence is overwhelming, and it is impossible to give the work of the scientific bureaus of investigation that continuous thought and consideration which its economical and highest results demand. An official charged with the whole work, thoroughly understood and regulated by him, would eliminate all duplication and unify the work to such an extent as to save the amount of his salary annually many times over. He should be a continuous official, not changed except for cause, so that he can formulate plans which would be consistent, harmonious, and continuous. The longer I remained in the Department the more the necessity for such an official became apparent, especially after I was made chairman of the Board of Government Exhibits at the Chicago Exposition. Naturally, these extra duties are imposed upon the Assistant Secretary, and I was burdened with these extra duties to the extent of almost depriving me of any consideration of what is really the highest work in the Department, to wit, its scientific work. It is a full field for a full man with the highest executive ability, and I sincerely hope that your recommendation may be adopted by Congress. I have no doubt of its practical value.

Yours, truly,

EDWIN WILLITS.

Hon. J. STERLING MORTON,

Secretary of Agriculture.

I thank you, gentlemen, for this hearing.

The CHAIRMAN. We have been enlightened and interested at the same time.

APPENDIX A

ORGANIZATION OF THE UNITED STATES DEPARTMENT OF AGRICULTURE BY BUREAUS, DIVISIONS, AND OTHER AGENCIES, AND THEIR WORK.

[Submitted for the purpose of showing the large amount of technical and scientific work of the Department in comparison with its purely administrative functions.]

1. ADMINISTRATIVE, OR PURELY BUSINESS, AGENCIES.

Secretary's office.

Weather Bureau:

Chief's office.

Chief clerk's office.

Publications Division.

Correspondence Division.

Division of Accounts and Disbursements: Adjusts all claims against the Department; prepares contracts for annual supplies, leases, and agreements; issues requisitions for the purchase of supplies and passenger and freight transportation, etc.

Division of Publications: Has supervision of the printing and publishing of the Department, and is especially charged with the preparation and publication of farmers' bulletins; supervises the work of illustrations; issues a monthly list of publications, and prepares for publication any information of special interest to agriculturists.

Gardens and Grounds: Is charged with the care and ornamentation of the park surrounding the Department buildings, the conservatories and gardens for testing and propagating economic plants, and with the distribution of the latter.

Seed Division.

Document and folding room.

2. TECHNICAL AGENCIES.

Weather Bureau: Has charge of the forecasting of weather; the issue of storm and other weather signals for the benefit of agriculture, commerce, and navigation; the gauging of rivers; the reporting of temperature and rainfall conditions for the cotton, rice, sugar, and other interests; the distribution of meteorological information, and the taking of meteorological observations to establish and record the climatic conditions of the United States. It includes:

Meteorological Data Division.

Forecast Division forecasts weather. storms, floods, cold waves, etc.

Climate and crop service.

Instrument laboratory.

Monthly Weather Review.

Climate and Health Division.

One hundred and fifty-four weather observing stations, fifty-two signal stations, etc.

Bureau of Animal Industry: Inspects meat for interstate and export trade; is charged with the control and eradication of contagious

diseases and the inspection of imported and exported animals; investigates diseases of animals; collects and distributes information in regard to the dairy industry; makes chemical investigations concerning diseases, foods, and toxic substances; prepares tuberculin and mallein for distribution to the States; studies animal parasites of domesticated animals, and investigates and reports upon subjects connected with the animal industry of the United States. It includes:

Inspection Division.

Field Investigations Division.

Dairy Division.

Experiment Station.

One hundred meat inspection stations in the country; twenty-one quarantine stations on coast, Canadian and Mexican borders; nine stations for inspecting exported stock; nineteen Texas fever inspection places.

Division of Statistics: Collects information as to the principal crops and farm animals; collects and coordinates statistics of agricultural production, distribution, and consumption; publishes a monthly crop report for the information of producers and consumers, and for their protection against combination. It supervises:

Twenty State agents.

A section of foreign markets.

Division of Forestry: Experiments, investigates, and reports upon the subject of forestry, and disseminates information upon forestry matters.

Division of Pomology: Collects and distributes information in regard to the fruit interests of the United States; investigates the habits and peculiar qualities of fruits, their adaptability to various soils and climates and conditions of culture, and introduces new and untried varieties. It supervises the preparation of models of fruit.

Division of Agricultural Soils: Investigates the texture and other physical properties of soils and their relation to crop production.

Office of Fiber Investigations: Collects and disseminates information regarding the cultivation of textile plants, including new and hitherto unused kinds; investigates the merits of new machines and processes for preparing them for manufacture.

Office of Irrigation Inquiry: Collects information regarding the best modes of agriculture by irrigation.

Office of Road Inquiry: Collects and distributes information concerning the systems of road management throughout the United States and the best methods of road making.

Museum.

SCIENTIFIC AGENCIES.

Weather Bureau:

Five professors of meteorology are engaged partly in research.

Bureau of Animal Industry:

Division of Animal Pathology.

Zoological Laboratory.

Biochemic Laboratory.

Division of Chemistry: Investigates the methods proposed for the analyses of soils and fertilizers, and agricultural products; investigates and reports on adulterations of foods, and on special subjects as ordered by Congress or the Secretary.

Office of Experiment Stations: Represents the Department in its relations to the experiment stations in all the States and Territories;

collects and disseminates general information regarding the colleges and stations, and publishes, regularly, accounts of agricultural investigations at home and abroad; indicates lines of inquiry; aids in arranging for cooperative experiments; reports upon the expenditures and work of the stations.

Division of Entomology: Obtains and disseminates information regarding insects in their relation to vegetation; investigates insects sent to the Division in order to give appropriate remedies; studies insect life in relation to agriculture in different parts of the country; conducts an insectary for studying the habits of insects, etc.

Biological Survey: Studies the geographic distribution of animals and plants; maps the natural life zones of the country; investigates the economic relations of birds and mammals, and promotes the preservation of beneficial and destruction of injurious species.

Division of Botany: Maintains the National Herbarium, publishes information on the treatment of weeds, experiments with poisonous and medicinal plants, and tests seeds with a view to their increased purity and commercial value.

Division of Agrostology: Investigates the natural history, geographical distribution, and uses of grasses and forage plants, their adaptation to special soils and climates, and the introduction of promising native and foreign kinds.

Division of Vegetable Pathology and Physiology: Seeks by investigations in the field and experiments in the laboratory to determine the causes of disease and the best means of preventing them; studies plant physiology in its bearing on pathology.

APPENDIX B.

PHOENIX, ARIZ., February 28, 1896.

DEAR SIR: In my temporary absence from Pennsylvania I have been informed of a proposition pending before Congress to establish the office of director-in-chief of scientific work in the Department of Agriculture, and the measure seems to me of so great importance that I respectfully ask leave to lay before you some of the considerations that influence my own judgment, in the hope that they or others like them may appeal to yours also.

The scientific work of that Department has come to be recognized at home and abroad as of the best quality, covering a very wide range of research and experiment, the object of which is to aid in developing, utilizing, and conserving the vast agricultural resources of the country. It has been a growth by separate divisions rather than a single administrative creation, and has for that reason lacked something of the unity, the efficiency, and the economy which might have been secured by a better defined coordination of all its branches under one directing head. Until quite recently it is probable that no serious difficulty has been felt on this point, but as soon as the Department became a Cabinet position many of the friends of agricultural science felt that the time had come to make a first step toward remedying the defect. Accordingly a committee of the Association of American Agricultural Colleges and Experiment Stations presented the matter to President-elect Harrison, shortly before his inauguration, urging upon him the importance of adopting such a policy in the organization and administration of the new Department as would give continuity and unity to its scientific work and remove it from political influence.

General Harrison expressed his cordial concurrence in the views presented by the committee, and immediately on the appointment of Secretary Rusk requested (it might even be said, instructed) him to name an Assistant Secretary who would carry them into effect. This was done, and the Secretary, by formal order, relegated the immediate supervision of all such branches of the Department to Assistant Secretary Willits, whose fine intelligence and high sense of public duty were most earnestly devoted to carrying out the policy indicated. In 1893 President-elect Cleveland expressed to a similar committee his hearty approval of this policy, and Secretary Morton, after some delay, was as fortunate as his predecessor had been in securing the services of the present accomplished Assistant Secretary, Dr. Dabney.

It will be seen that the inherent defects of the situation have been clearly seen, but have been neutralized, as far as practicable, by the good judgment of two successive heads of the Department, and I have taken the liberty to detail these facts, which are within my personal knowledge, for the sake of showing that the measure now proposed would merely give the sanction of law to a practice which has been deliberately approved and followed under two successive Administrations of opposite political faith.

At first thought the suggestion may present itself that other Secretaries may be trusted to adopt a similar course, and that, therefore, no legislation is required. But there are two or three weighty and, as it seems to me, conclusive considerations against the acceptance of that view. In the first place, if the practice actually followed is a good one, it would seem to be the part of wisdom to make it a secure and permanent factor in the established system rather than trust it to uncertain chances. The direction of this scientific work should be both continuous and progressive. Everyone recognizes the fact that in order to secure the best results those who have charge of its separate branches must possess a high degree of special training, supplemented by careful and prolonged experience, and, as a matter of fact, most of the chiefs of scientific bureaus and divisions are retained without regard to changes of Administration. But it must be obvious that the same necessity exists in still greater degree with reference to the control and direction of the whole body of such work.

If Assistant Secretary Willits, for example, was the man for the place he should have been continued in it and undoubtedly would have been except that his appointment was necessarily a political one. The same remark applies to the present Assistant Secretary, and the only practicable way of securing the desired end is to provide a head for all this work whose tenure shall be at least as secure as that of his subordinates, by making it also nonpolitical.

A further consideration is that the work of the Department has become so extensive as to require the services of two officers instead of the single one now provided for. The proper direction of the scientific work will fully absorb the time and the powers of the ablest man who can be secured for the position.

Besides having a broad and varied scientific knowledge, he must possess organizing and administrative ability of a high order, since these branches of the Department involve at present the employment of nearly 1,000 men and the annual expenditure of nearly \$1,750,000.

The duties of this position are wholly incompatible both with those of a political nature and with those more general administrative duties to which an Assistant Secretary must necessarily devote much of his time and attention.

Trusting that the importance of this subject may be a sufficient apology for this long communication, I am, with great respect,

Faithfully, yours,

GEO. W. ATHERTON,
President of the Pennsylvania State College.

Hon. REDFIELD PROCTOR,
United States Senate, Washington, D. C.

[From members of the faculty of the Johns Hopkins University.]

The undersigned, having been informed that it is proposed to create in the Department of Agriculture the office of director of scientific work, hereby express their conviction that the measure proposed is wise and timely. It has been demonstrated beyond question, during the present generation, that the applications of science to agriculture are innumerable and important. The work of the Department has met with the approval of highly qualified judges throughout this country and in other lands. In our opinion the time has come to give unity and permanence to this work by establishing an office to be held by a person of high qualifications, who shall not be liable to removal because of a change in the general Administration of the Government.

DANIEL C. GILMAN, *President.*

IRA REMSEN, *Professor of Chemistry.*

WM. B. CLARK, *Professor of Organic Geology.*

HENRY N. ROWLAND, *Professor of Physics.*

WM. H. HOWELL, *Professor of Physiology.*

JAS. E. HUMPHREY, *Lecturer on Botany.*

EDWARD H. GRIFFIN, *Dean of the College Faculty.*

EDWARD RENOUF, *Collegiate Professor of Chemistry.*

H. N. MORSE, *Professor of Analytical Chemistry.*

FEBRUARY 18, 1896.

[From the faculty of Yale University.]

NEW HAVEN, CONN., *February 25, 1896.*

We, the undersigned, officers in Yale University, having been informed that the Honorable Secretary of Agriculture wishes to create in his Department a director of scientific work, to hold the office during good behavior, wish to express our belief that the measure is a wise one.

The practical applications of science in the prosecution of our industries are too numerous and are on too vast a scale in our country to need any argument regarding their importance. The work of the Department of Agriculture in this direction has met with the approval of those best qualified to judge, both as to its scientific value and its practical use.

In our opinion, efficiency in the work and economy in expenditures will be increased by placing the scientific work under the supervision of a person of high qualifications, whose tenure of office shall be as permanent as that of professors in universities or experts in industrial establishments.

We believe that this is a fit time and the Department a practical place for the establishment of such an office, and earnestly and respectfully petition that the measure will be carried out.

TIMOTHY DWIGHT, *President.*

WM. H. BREWER, *Professor of Agriculture.*

A. J. DUBOIS, *Professor of Civil Engineering.*

SIDNEY I. SMITH, *Professor of Comparative Anatomy.*

R. H. CHITTENDEN, *Professor of Physiological Chemistry.*

JOHN E. CLARK, *Professor of Mathematics.*

WM. G. MIXTER, *Professor of Chemistry.*

L. L. PENFIELD, *Professor of Mineralogy.*

A. E. VERRILL, *Professor of Zoology.*

HENRY W. FARNUM, *Professor of Political Economy.*

S. W. JOHNSON, *Professor of Agricultural Chemistry.*

HORACE L. WELLS, *Professor of Chemistry.*

CHARLES S. HASTINGS, *Professor of Physics.*

SHEFFIELD SCIENTIFIC SCHOOL OF YALE UNIVERSITY,

New Haven, Conn., February 20, 1896.

DEAR SIR: I learn that the Secretary of Agriculture has asked for an appropriation of \$6,000 for the salary of a "director-in-chief of scientific bureaus and investigations," who is to serve during good behavior and to have authority to act as Assistant Secretary.

I earnestly hope that the appropriation may be made. I consider the suggestion one of extreme importance, and if the matter can be brought about it will be more far-reaching in its results than its mere use in the Agricultural Department. I have long been reasonably familiar with the operations of the scientific bureaus in the several Departments at Washington, and have had exceptional opportunities to know the opinions held by prominent scientific men of the country regarding the conditions necessary or desirable for the most efficient scientific work done in these bureaus.

Some years ago, as a member of the Committee of the National Academy of Sciences, asked to consider plans looking to the better correlation of the work of the scientific bureaus of the several Departments of Government, I studied the general subject at length. Since then I have been familiar with the work of the Department of Agriculture and of the important effect it is having on the industries of the country.

I feel that the present movement is entirely in the right direction. Much more than that, it seems to me to be more practical than any of the plans that have heretofore been suggested.

It requires no argument that, for the good of the work to be accomplished, there should be permanency in the office of the one who supervises the work, and only by a permanence similar to that existing in the offices of scientific men in universities, or even great technical establishments, can a man of the highest standing be available. I am confident that only by some such permanence of office can the efficiency and character of the work of the Department be depended upon from administration to administration.

That this is in the direction of good government needs no argument; nor that it would be more economical in the end.

Moreover, there is no question in my mind but that such a move-

ment would exert a most excellent influence on the other Departments, and enhance the scientific value of the Government work in the estimation of both scientific men and of the citizens who practically apply the results in their vocations.

Yours, respectfully,

WM. H. BREWER,
Professor of Agriculture in Yale University.

Hon. REDFIELD PROCTOR,
Chairman of the Committee on Agriculture.

HARVARD UNIVERSITY,
Cambridge, March 9, 1896.

SIR: I have examined carefully the argument addressed to the Committee on Agriculture of the United States Senate and House of Representatives by the Secretary of Agriculture, Hon. J. Sterling Morton, in which he advocates the appointment of a director-in-chief of scientific bureaus and investigations, to serve during good behavior, at a salary of \$6,000. The argument seems to me to be forcible and in accordance with all trustworthy experience in the management of such scientific undertakings, whether conducted by governments or by universities.

I have the honor to be, your obedient servant,

CHARLES W. ELIOT.

Hon. REDFIELD PROCTOR.

HARVARD UNIVERSITY, LAWRENCE SCIENTIFIC SCHOOL,
Cambridge, Mass., February 18, 1896.

MY DEAR SIR: I beg leave to enter with you my petition that the proposed amendment to the Agricultural appropriation bill, providing for the appointment of a director-in-chief of scientific bureaus and investigations, may find favor with your committee.

The change which will be made by the adoption of the measure will secure unity in the varied work of the Department and will increase the effectiveness of the excellent service which the Department is rendering to the economic and scientific interests of this country.

Yours, very truly,

N. S. SHALER.

Senator REDFIELD PROCTOR,
Chairman Committee on Agriculture.

CORNELL UNIVERSITY, OFFICE OF THE PRESIDENT,
Ithaca, N. Y., February 24, 1896.

DEAR SIR: Secretary Morton's recommendation to Congress of the appointment of a director-in-chief over the scientific work of the Department of Agriculture has been brought to our attention here, and the men connected with the work in the agricultural experiment station at Cornell University are unanimous in urging the wisdom of complying with Secretary Morton's suggestion. It is believed that the scientific work in agriculture could not only be greatly furthered by having an able scientist in direct and permanent charge of the

whole matter, but that it would result in an actual saving to the Department, owing to the fact that the various semi-independent subheads in the Department are not properly organizing the work, and are wastefully duplicating one another's investigations, etc.

I take the liberty, therefore, as one directly interested in the work, of writing to urge that you should further the carrying out of the Secretary's recommendation when it comes up before the Senate for consideration.

Yours, very truly,
 Senator REDFIELD PROCTOR,
Washington, D. C.

J. G. SCHURMAN.

COLUMBIA COLLEGE,
New York, February 13, 1896.

MY DEAR SIR: I have just learned that the Secretary of the Department of Agriculture has asked for the insertion in the appropriation bill for the Department of the following words: "Director-in-chief of scientific bureaus and investigations, to serve during good behavior, to have authority to act as Assistant Secretary, and to perform such other duties as the Secretary may direct, \$6,000."

It gives me pleasure to say that I look upon this suggestion as opening the way for a most important reform in relation to the scientific work of the Department, and, incidentally, of the scientific work of the Government as a whole. From the nature of the case, scientific work is as far as possible removed from the sphere of politics. Permanency in the direction of it is essential to the accomplishment of the best results—

(1) Because only by permanency can the oversight and direction of a man of the highest standing be secured; and

(2) Because very many scientific investigations have to be maintained for a series of years before they yield trustworthy results.

Speaking as an administrator, I should take it for granted that such an officer appointed on a permanent tenure during good behavior would save to the Government many times his salary every year in administrative expenses, while he would multiply very greatly the efficiency of all bureaus placed under his care. I think it quite probable that the Government would be asked to appropriate as much money after such an appointment as now, but I am confident the money would go a great deal further and produce much more valuable results. Under these circumstances, I venture to hope that your committee and the House will adopt the suggestion of the Secretary in regard to this very important matter. I do not think it easy to overestimate the effect it would have upon the scientific standing of the Government work in all its relations both at home and abroad.

Respectfully,

SETH LOW.

Hon. JAMES W. WADSWORTH,
*Chairman of the Committee on Agriculture,
 House of Representatives, Washington, D. C.*

MASSACHUSETTS INSTITUTE OF TECHNOLOGY,
Boston, February 26, 1896.

MY DEAR SENATOR PROCTOR: My attention has been called to a letter addressed by the Honorable Secretary of Agriculture, under date

of the 11th instant, to the committees on Agriculture in the two Houses of Congress.

I do not know that my opinion on such a matter will be of any interest to the committee over which you preside, but I feel moved to say that it seems to me that the large and varied work, scientific in its character and in its bearings, now required of the Department of Agriculture, make it highly expedient that there should be a general director of all such branches and services of the Department, both in order that the work may be done to the best advantage and that it may be done with the greatest economy. The Secretary and the Assistant Secretary of Agriculture, being by the necessity of the case political, both in their leading interests and in their tenure of office, it seems to me clear that a permanent, systematic, and expert supervision and direction should be secured for this great variety of scientific investigation and research.

Very truly, yours,

FRANCIS A. WALKER.

BOSTON UNIVERSITY, PRESIDENT'S OFFICE,
Boston, February 19, 1896.

DEAR SIR: My attention having been called to the proposal to have appointed a director-in-chief of scientific bureaus and investigations under the authority of the Secretary of Agriculture, I beg to add my recommendation to those sure to reach you at an early date.

To confine myself to the one point on which, as an educator, I have a better right to speak, I would say that I have often been impressed by the lack of harmonious cooperation observable in the laboratory work of the agricultural colleges and in the experiment stations connected with them. Of course every agricultural faculty should be encouraged to invent and follow out new lines of investigation, but even the professors who most prize individual and collegiate initiative would be glad to cooperate with colleagues in other institutions and even in other nations, if by so doing they could hope to settle some of the problems that have a scope too broad for any one locality or any one country. A scientific director-in-chief would be just the man needed to receive and to give suggestions relating to such cooperations.

I think he would be worth to the country far more than the amount of his salary had he no other function than this at which I have hinted.

I might urge many other important considerations, but will leave them to others.

With best hopes for the success of the measure, I remain,

Yours, respectfully,

WM. T. WARREN.

Hon. REDFIELD PROCTOR,
Washington, D. C.

CLARK UNIVERSITY,
Worcester, Mass., February 21, 1896.

MY DEAR SIR: I think it is a matter of the greatest scientific importance to take all the scientific bureaus out of politics. It would make for economy and efficiency alike, and I am greatly rejoiced to learn that there is some prospect that your bill may accomplish this for the Department of Agriculture.

I am, very respectfully, yours,

G. STANLEY HALL,
President of the University.

Hon. REDFIELD PROCTOR.

OHIO STATE UNIVERSITY, EXECUTIVE OFFICE,
Columbus, February 22, 1896.

DEAR SENATOR PROCTOR: I learn that the Secretary of Agriculture has asked Congress to appoint a director-in-chief over the constantly increasing scientific work of his Department. * * * I know the work referred to and have had an opportunity from my executive position, as well as from other standpoints, to follow it and test it, and to learn of its extent and usefulness. I am sure the request of the Secretary is an entirely reasonable one, and the suggestion which he makes with regard to the appointment of a director-in-chief is worthy of very careful consideration. I understand that this matter has been referred to your committee, and I beg leave to present to you, and through you to your committee, my most sincere approval of this plan, and to express my hopes that your committee will make a favorable report thereon.

Cordially, yours,
Senator REDFIELD PROCTOR.

JAMES H. CANFIELD, *President.*

WASHINGTON UNIVERSITY,
St. Louis, Mo., March 19, 1896.

DEAR SIR: In response to your circular letter of March 7, 1896, I send you a paper which has been signed by the professors of this institution. I trust the measure which you are advocating may be adopted.

I am strongly in favor of appointing a director of scientific work in the Department of Agriculture, to hold office during good behavior. I do not see why his political convictions should in any way influence his scientific work, and I believe it is the experience of all institutions that scientific men should be kept in their positions as long as they do their work satisfactorily.

Truly,
W. S. CHAPLIN,
Chancellor.

Prof. J. STANLEY BROWN,
*Secretary Joint Commission of the Scientific Societies,
1318 Massachusetts avenue, Washington, D. C.*

WASHINGTON UNIVERSITY,
St. Louis, Mo., March 18, 1896.

The undersigned officers in Washington University urge the appointment of a director of scientific work in the Department of Agriculture, to hold office during good behavior: W. S. Chaplin, chancellor; C. M. Woodward, dean, and professor of mathematics and applied mechanics; M. S. Snow, dean of college and professor of history; Otto Heller, professor of German; J. B. Johnson, professor of civil engineering; J. H. Kinealy, professor of mechanical engineering; J. M. Dixon, professor of English literature; Holmes Smith, instructor in drawing; E. A. Engler, professor of mathematics and descriptive geometry; G. Hambach, adjunct professor of geology; H. S. Pritchett, professor mathematics and astronomy; S. Waterhouse, professor of Greek; Henri Dumay, instructor in French; H. Aug. Hunicke, adjunct professor of applied chemistry; William Hancock, first lieutenant, Fifth Artillery, professor military science and tactics; George E. Jackson, professor of Latin.

THE UNIVERSITY OF NEBRASKA,
Lincoln, February 24, 1896.

DEAR SIR: Permit me respectfully, but very earnestly, to beg you if possible to support the recommendation of the Hon. J. Sterling Morton for the insertion after line 11, page 1, of the bill making appropriation for the Department of Agriculture (H. R. 5161) the words:

Director-in-chief of scientific bureaus and investigations to serve during good behavior, to have the authority to act as Assistant Secretary, and to perform such other duties as the Secretary may direct, \$6,000.

As the director here of an experiment station in the closest contact with the people of an agricultural State, I have come to appreciate the greatness of the scientific work intrusted to the United States Department of Agriculture. I am confident that the people of Nebraska would sustain almost unanimously the proposition for a director-in-chief of scientific bureaus and investigations.

Believe me, my dear sir, very respectfully, yours,

GEORGE E. MACLEAN,

Director of the Station and Chancellor of the University.

Senator REDFIELD PROCTOR,

Senate Chamber, Washington, D. C.

UNIVERSITY OF GEORGIA,
Athens, Ga., March 20, 1896.

DEAR SIR: Permit me to add my petition to those already presented for the adoption by Congress of the recommendation made by the Secretary of Agriculture that provision be made for a director in chief of the scientific bureaus, the appointment to be nonpolitical and held during good behavior. Aside from the general considerations which have been presented in advocacy of the proposition—and which I respectfully and cordially indorse—an official experience of more than twenty years, requiring an almost constant connection with and (to a certain extent) dependence upon the scientific work of the Department of Agriculture, leads me to the firm belief that the unification of such work in the manner proposed would inure greatly to the benefit of those in whose interests especially the work is prosecuted.

I have the honor to be, very respectfully, yours,

H. C. WHITE,

President Georgia State College, University of Georgia.

Hon. REDFIELD PROCTOR,

United States Senate, Washington, D. C.

STATE COLLEGE OF KENTUCKY,
Lexington, Ky., February 24, 1896.

DEAR SIR: I believe that the suggestion of the Secretary is a wise one. The management of the Department so far as the scientific work is concerned should be eliminated from politics. If the amendment is adopted it at once removes the management of such work from the sphere of politics, gives permanency of direction and unity to the work, and effectiveness of service. The Secretary and Assistant Secretary are in the nature of the case administrative officers, and as such they must necessarily represent the Administration as to politics—the Assist-

ant Secretary, at least, to such a degree as to represent the Administration in the absence of the Secretary. Both, therefore, will most generally go and come with the change of Administration. Scientific investigations must be planned ahead and work must be continuous. The outgoing Secretary hesitates to make plans reaching beyond his own administration. It would take the incoming Secretary and Assistant Secretary some time before they knew what was best to do in the line of scientific work; consequently at the beginning of every Administration work comes to a standstill and perhaps important investigations cease altogether. With a director-in-chief who holds his position during good behavior, and therefore would not be subject to political changes, the investigations would be continued and uninterrupted by administrative changes. The salary of the director-in-chief should be adequate to bring the very best scientific man in the country to the Department.

I venture to hope that your committee will incorporate the suggestions contained in the amendment in the Senate bill.

Very truly, yours,

M. A. SCOVELL,

Director Kentucky Agricultural Experiment Station.

JAS. K. PATTERSON,

President A. and M. College.

Hon. REDFIELD PROCTOR,

Senate Chamber, Washington, D. C.

UNIVERSITY OF VIRGINIA, *February 22, 1896.*

The proposal to strengthen the United States Department of Agriculture by the addition to its staff of a director of scientific work seems to me a wise one—likely to much increase the value of the investigations undertaken in the interest of agricultural progress.

Clear definitions of the questions to be studied, personal responsibility for the scientific discretion exercised in this selection, unity of plan in regard to the methods to be employed, and permanence in office of the directing head, who can also best coordinate and reduce to form for publication the results reached, are the conditions on which will largely depend the real value of these results, and the proposal in question, if acted on, will go far toward securing such conditions.

J. W. MALLETT,

Professor of Chemistry.

CORNELL UNIVERSITY, COLLEGE OF AGRICULTURE,

Ithaca, N. Y., February 21, 1896.

DEAR SIR: I have read with both pleasure and profit your able communication to the Committees on Agriculture of the United States Senate and House of Representatives.

It gives evidence that the situation is thoroughly understood and that the recommendation is made with a clear understanding of the changes necessary to secure the highest efficiency of the many and varied activities in charge of the Secretary of Agriculture.

Very sincerely, yours,

I. P. ROBERTS, *Director.*

Hon. J. STERLING MORTON,

Secretary of Agriculture, Washington, D. C.

MASSACHUSETTS AGRICULTURAL COLLEGE,
Amherst, Mass., February 19, 1896.

DEAR SIR: The Secretary of Agriculture has asked Congress to appoint a director-in-chief over the constantly increasing scientific work of the Department. One million seven hundred thousand dollars out of the entire appropriation are annually used in this scientific and technical work, and 1,000 employees are engaged in carrying it on. It would seem the part of wisdom to place over it a permanent, broadly educated, and experienced scientific superintendent.

The step proposed is distinctly in the right direction. It removes the whole scientific force from out of the sphere of politics. It gives permanency and unity to the work, coordinating the various parts into one harmonious whole. It promotes economic management and will lead to the best results.

* * * * *

HENRY H. GOODELL,
President Massachusetts Agricultural College, etc.

THE PENNSYLVANIA STATE COLLEGE,
State College, Center County, Pa., March 3, 1896.

DEAR SIR: I take the liberty of calling your attention to the proposition made by the Secretary of Agriculture in a letter to the Committees on Agriculture of the Senate and House, to provide in the Department of Agriculture a director-in-chief of scientific bureaus and investigations for the purpose of securing unity and continuity in the extensive scientific work of this Department. I understand that an amendment to this effect is to be introduced by Senator Proctor, and if it is, I trust that you will see your way clear to support it.

The arguments in its favor presented by the Secretary seem to me very strong, while another point in its favor, not specifically mentioned by him, is that it would have a strong tendency to coordinate the work of the various agricultural experiment stations with that of the Department of Agriculture. I think it is safe to say that such an officer would save his salary many times over to the Government in a single year.

I am perfectly aware that propositions from the Secretary of Agriculture are not likely to be received with favor by the present Congress. Nevertheless, I venture to hope that a matter of such general importance to all the agricultural interests of the country may be considered upon its merits independently of the source from which it comes, even if it should be deemed necessary to so modify the amendment as to postpone the actual appointment of such officer until after the 4th of March next.

Very respectfully, yours,

H. P. ARMSBY, *Director.*

Hon. J. DONALD CAMERON,
Senate Chamber, Washington, D. C.

ILLINOIS STATE LABORATORY OF NATURAL HISTORY,
Urbana, Ill., March 12, 1896.

DEAR SIR: I have been much interested and pleased at the notices which have come to me from time to time of the proposition made, as

I understand by you, to Congress that provision be made for the appointment by the President of a director in chief of scientific bureaus in the Department of Agriculture, at Washington. I do not know in what stage this movement may be, and whether any expression of opinion by those particularly interested because of their relations to the Department and the subjects which it represents, can be regarded as helpful, but I wish to say to you that if I can help in any way to bring about so desirable an end I shall be pleased to have the opportunity.

The United States Department of Agriculture is becoming now one of the great agencies of the country for scientific investigation of the first class, not the less thoroughgoing in character or superior in expert quality because it is directed to subjects of public concern. Nevertheless, the service rendered to the country by the different divisions could undoubtedly be considerably increased and improved by a careful organization and close and intelligent supervision and direction, such as none but an officer immediately charged with the whole subject could be expected to give. Indeed, I can not think of any rational point of view from which the proposition can be criticised unfavorably.

Respectfully,

S. A. FORBES, *Director.*

Hon. J. STERLING MORTON,
Secretary of Agriculture, Washington, D. C.

UNIVERSITY OF WISCONSIN,
AGRICULTURAL EXPERIMENT STATION,
Madison, Wis., February 18, 1896.

DEAR SIR: I have just learned that Secretary Morton has sent a communication to the Agricultural Committee recommending the creation of the office of director-in-chief of scientific bureaus and investigations in the Department of Agriculture.

I take this early opportunity of writing you that I believe this a most important and timely recommendation, and one which will meet with your entire approbation when you have studied the matter carefully. The Secretary of Agriculture and the Assistant Secretary can not, from the very nature of their offices, give that close attention and continued effort in keeping the scientific bureaus up to their highest efficiency and securing from them the greatest amount of good work possible for the money expended. With an outlay of something like \$1,700,000 for scientific work and investigation, Secretary Morton's recommendation for a head supervisor and director for this vast expenditure seems in line with what any good business man would do under the same circumstances.

* * * * *

Trusting and believing that this matter will receive thoughtful attention at your hands, I am,

Very respectfully,

W. A. HENRY, *Director.*

Hon. WM. F. VILAS,
United States Senate, Washington, D. C.

NEW JERSEY AGRICULTURAL EXPERIMENT STATION,
New Brunswick, N. J., February 21, 1896.

DEAR SIR: The agricultural institutions here heartily indorse the recommendation of Secretary Morton in his communication of February 11 to the Committee on Agriculture of the United States Senate. In our judgment an officer designated as director-in-chief of scientific bureaus and investigations would greatly increase the efficiency of the work of the Department.

The very able presentation of the matter by the Secretary of Agriculture renders it unnecessary to add further argument. I simply desire to inform your committee that a favorable consideration of this matter would meet the approval of the agricultural experiment stations, of the college, of the State board of agriculture and horticulture, and of the farmers' organizations in the State.

Respectfully, yours,

E. B. VOORHEES.

Senator REDFIELD PROCTOR,
Washington, D. C.

EXPERIMENT STATION,
 THE AGRICULTURAL COLLEGE OF UTAH,
Logan, Utah, February 27, 1896.

SIR: A copy of the amendment proposed by Secretary Morton to the bill making appropriations for the Department of Agriculture has been received at this office, with a request for our opinion concerning it. It is proposed to insert, after line 11, page 1, of H. R. 5161, the words:

Director-in-chief of Scientific Bureaus and Investigations, to serve during good behavior, to have the authority to act as Assistant Secretary, and to perform such other duties as the Secretary may direct, six thousand dollars.

At this college and experiment station we strongly favor the amendment advocated by the Secretary of Agriculture.

Truly, yours,

J. H. PAUL,
President and Director.

Senator REDFIELD PROCTOR,
Washington, D. C.

NEW MEXICO COLLEGE OF AGRICULTURE
 AND MECHANIC ARTS,
 AND AGRICULTURAL EXPERIMENT STATION,
Mesilla Park, N. Mex., March 11, 1896.

SIR: Having received copies of the papers relating to the proposed appointment of a director in chief of scientific bureaus of investigations in the Department of Agriculture, I desire, as one of many, to express my entire approval of the plan. That scientific workers should be allowed to pursue their researches continuously, without political interference, so long as they do their duty and behave well, is self-evident; yet it must be confessed that this simple standard is by no means uniformly acted up to in the Government scientific institutions of this country. It is to be remarked, however, that although there is

doubtless much room for reform in the Department of Agriculture, it is not there that the influences detrimental to scientific work are most powerful.

Yours, very respectfully,

THEO. D. A. COCKERELL,
Entomologist.

Hon. J. STERLING MORTON,
Secretary of Agriculture.

ACADEMY OF SCIENCE AND ART,
Pittsburg, March 19, 1896.

DEAR SIR: At a regular meeting of the Academy of Science and Art of Pittsburg, held this day, the following resolution was unanimously adopted:

Resolved, That the Academy of Science and Art of Pittsburg is heartily in favor of the proposition now before Congress to create the office of director in chief of scientific divisions in the Department of Agriculture, and that our Senators and Representatives are requested to use their best endeavors to have it adopted by Congress.

Yours, respectfully,

W. L. SCAIFE,
Secretary pro tem.

Mr. J. STANLEY BROWN,
*Secretary Joint Commission of the
Scientific Societies of Washington, D. C.*

CHEMICAL LABORATORY, WASHINGTON UNIVERSITY,
St. Louis, March 17, 1896.

DEAR SIR: Acting in accordance with instructions from the council of the St. Louis Academy of Science, I have the honor to forward to you a copy of the resolution, passed by unanimous vote of the Academy at its last regular meeting, held on March 16:

Resolved, That the St. Louis Academy of Science heartily approves the proposition to create the office of "director in chief of scientific divisions in the Department of Agriculture," to be filled by a broadly educated and experienced scientific administrative officer, holding office during good behavior.

Very respectfully,

ALLERTON S. CUSHMAN,
Corresponding Secretary.

J. STANLEY BROWN, Esq.,
*Secretary Joint Commission of the
Scientific Societies of Washington, D. C.*

IOWA AGRICULTURAL COLLEGE,
Ames, Iowa, March 27, 1896.

DEAR SIR: Your communication with reference to resolutions adopted with regard to a director in chief of the scientific divisions in the Department of Agriculture is received.

The Iowa Academy of Science will not hold a session till the latter part of December, at which time, if not too late, I shall take pleasure in presenting the matter.

I trust, however, that a measure so evidently in the line of progress in the efficiency of the scientific work of the Department of Agriculture will not wait for pressure from without, but be accorded as an eminently fit and proper action by the Members of Congress when they have had their attention called to it. That such an officer could add greatly to the strength of each of the divisions and improve the already splendid showing of the Department as a whole would, it seems to me, be recognized at once by anyone at all familiar with the work of the Department.

Hoping that your efforts will meet with prompt success,

Very truly, yours,

HERBERT OSBORN,
Secretary Iowa Academy of Science.

Mr. J. STANLEY BROWN,
Secretary Joint Commission, Washington, D. C.

DAVENPORT ACADEMY OF NATURAL SCIENCES,
Davenport, Iowa, March 28, 1896.

At a meeting of the Davenport Academy of Sciences, held March 27, the following resolution was unanimously adopted:

Resolved, That this academy heartily concur in the movement now being made for the appointment of a director in chief of the scientific bureaus of the Department of Agriculture.

W. H. BARRIS,
Corresponding Secretary.

NEBRASKA ACADEMY OF SCIENCES,
Lincoln, Nebr., March 21, 1896.

Resolved, That the Nebraska Academy of Sciences does heartily indorse the proposition to create the office of director in chief of scientific divisions in the Department of Agriculture.

Adopted by unanimous vote March 20, 1896.

ERWIN H. BARBOUR, *President.*
G. D. SWEZEY, *Secretary.*

CALIFORNIA ACADEMY OF SCIENCES,
San Francisco, Cal., March 18, 1896.

DEAR SIR: I have the honor to transmit for your consideration the inclosed copy of resolutions passed at the last stated meeting of the California Academy of Sciences, in reference to the appointment of a "director in chief of scientific bureaus" of the Department of Agriculture.

Yours, very respectfully,

J. O. B. GUNN,
Corresponding Secretary.

Hon. REDFIELD PROCTOR,
Chairman of Senate Committee on Agriculture,
Washington, D. C.

SAN FRANCISCO, CAL., March 18, 1896.

At the stated meeting of the California Academy of Sciences, held March 16, 1896, the following resolutions were unanimously adopted:

Whereas so largely are the prosperity and happiness of the people of our country dependent upon the products of the soil, and so largely do the extent and profitability of these products depend upon the degree of scientific knowledge with which agriculture is pursued, that any measure which will increase the amount and efficiency of such knowledge ought to receive the heartiest support of the whole people; and

Whereas it appears that such a measure is that now before the Congress of the United States proposing to create the office of "director in chief of scientific divisions" in the National Department of Agriculture, the position to be filled by a person whose selection and tenure of office shall be determined solely by his scientific and business qualifications; therefore, be it

Resolved, That the California Academy of Sciences heartily approves the proposition.

G. P. RIXFORD, *Recording Secretary*.

WESLEYAN UNIVERSITY,
Middletown, Conn., February 20, 1896.

SIR: I have the honor to transmit herewith a copy of resolutions passed by the Middletown Scientific Association at its last regular meeting and to request, in behalf of the association, your favorable attention to the subject.

Respectfully,

CHAS. D. WOODS,
Corresponding Secretary Middletown Scientific Association.

Hon. REDFIELD PROCTOR,
Chairman Committee on Agriculture,
United States Senate, Washington, D. C.

MIDDLETOWN, CONN., February 20, 1896.

At the regular meeting of the Middletown Scientific Association on February 19 the following resolution was adopted:

"Resolved, That this association has been most gratified to learn of the proposition of the Secretary of Agriculture to Congress for the appointment of a director-in-chief of the scientific and technical work of the Department of Agriculture, and that the association earnestly hopes that the measure may receive favorable consideration by Congress."

W. P. BRADLEY, *Secretary*.

NUTTALL ORNITHOLOGICAL CLUB,
Cambridge, Mass., March 19, 1896.

DEAR SIR: In response to your esteemed favor of March 7 I have the honor to transmit to you, inclosed, a copy of a vote taken at a regular meeting of the Nuttall Ornithological Club, held March 16. May I ask you to kindly forward to me 15 copies of your printed resolutions, that I may inclose them to the Senators and Representatives from Massachusetts, in accordance with the vote of the club?

Yours, very respectfully,

FRANCIS H. ALLEN, *Secretary*.

J. STANLEY BROWN, Esq.,
Secretary Joint Commission of the
Scientific Societies of Washington.

Please address Francis H. Allen, Park street, West Roxbury, Mass.

At a meeting of the Nuttall Ornithological Club of Cambridge, Mass., held March 16, 1896, it was voted—

That the resolutions of the joint commission of the scientific societies of Washington advocating the creation of the office of director in chief of scientific divisions in the Department of Agriculture, a copy of which is annexed herewith, meet the hearty approval and receive the indorsement of this club, as being in the interest of the proper advancement of science.

The secretary of the club is hereby instructed to send a copy of this vote to the Senators and Representatives from Massachusetts, thereby calling their attention to the proposed improvement in the workings of the Department of Agriculture and the favor with which it is received by the Nuttall Ornithological Club of Cambridge.

NATURAL SCIENCE ASSOCIATION OF STATEN ISLAND,
New Brighton, March 16, 1896.

DEAR SIR: I am instructed to transmit to you the following copy of a minute adopted by this association at the regular meeting held March 14, 1896:

This association is glad of the opportunity to express its gratification at the proposed consolidation, under one head, of the scientific work of the Department of Agriculture, believing that such consolidation would greatly encourage such work, and would probably lead to a similar arrangement in other Departments of the National Government—an end which would be welcomed by all scientific workers.

Respectfully,

ARTHUR HALLICK, *Secretary.*

J. STANLEY BROWN,
Secretary Joint Commission, etc.

THE ZOOLOGICAL SOCIETY,
Philadelphia, March 14, 1896.

DEAR SIR: I have the honor to inform you that at a stated meeting of the board of directors of the Zoological Society of Philadelphia, held on the 13th instant, a resolution was adopted favoring the appointment of a director in chief of the scientific divisions in the Department of Agriculture.

Very respectfully, your obedient servant,

HENRY T. COATES, *Secretary.*

J. STANLEY BROWN, Esq., *Secretary.*

At a meeting of the Spencer F. Baird Naturalists' Association No. 2, of Reading, Pa., held Saturday, March 14, 1896, the following resolutions were adopted and ordered to be spread on the minutes:

Whereas there has been started a movement by the joint scientific societies of Washington looking to the creation of an office in the Department of Agriculture, the holder of which is to be styled the "director of scientific work;" and

Whereas the relation scientific work in all its phases bears to agriculture is of such enormous value, and believing that the usefulness of the Department could be increased and extended by the creation of such an office: Therefore be it

Resolved, That we, the officers and members of the Spencer F. Baird Naturalists' Association No. 2, of Reading, Pa., heartily approve of the movement, and that we lend it our hearty support. It is further

Resolved, That a copy of these brief resolutions be forwarded to the secretary of the Joint Commission of Scientific Societies of Washington, to be used in the matter as he may direct.

LEVI W. MENGEL, *Secretary.*

Attest:

CHAS. H. RANDENBUSH, *President.*

ALABAMA POLYTECHNIC INSTITUTE,
A. AND M. COLLEGE,
Auburn, Ala., February 29, 1896.

SIR: At a meeting of the council of the agricultural experiment station yesterday I was authorized to communicate to you the unanimous approval of the measure recently recommended to Congress by the Hon. J. Sterling Morton, Secretary of Agriculture, respecting the appointment of a director-in-chief of the scientific bureaus of that Department, and would urge your hearty cooperation in this matter, so vital to the efficient working of the extensive scientific staff of the Department of Agriculture.

Respectfully, yours,

LUCIEN M. UNDERWOOD,
For the Council.

Hon. REDFIELD PROCTOR,
Washington, D. C.

Resolved, That the Botanical Seminar of the University of Nebraska has learned with great pleasure of the recommendation of the Secretary of Agriculture to create the office of "director in chief of scientific divisions in the Department of Agriculture," to be held by a scientist of broad education and experience, holding office during good behavior.

Resolved, That the Seminar heartily approves of this plan, as one which will give permanence and unity to the scientific work of the Department, and greatly increase its value and the efficiency of the several scientific divisions.

Adopted March 25, 1896.

HENRY BALDWIN WARD,
FREDERIC E. CLEMENTS,
Committee.

Resolved, That the Lincoln Microscope Club expresses its hearty approval of the proposal to give unity and permanence to the scientific work of the United States Department of Agriculture by putting such work in charge of a broadly educated and experienced scientist as "director in chief of scientific divisions."

Resolved, That the club requests for this matter the favorable consideration of Congress, and especially of the Member from this city.

ROSCOE POUND,
ERWIN H. BARBOUR,
E. T. HARTLEY,
Committee.

Adopted March 26, 1896.

ROSCOE POUND, *Secretary.*

MASSACHUSETTS STATE BOARD OF AGRICULTURE,
Boston, Mass., February 20, 1896.

DEAR SIR: I take the liberty of writing you to urge that the Committee on Agriculture give favorable consideration to the proposition now before them to provide a director-in-chief of scientific bureaus and investigations, to serve during good behavior, to have authority to act as Assistant Secretary of Agriculture, and to perform such other

duties as the Secretary may direct. My reasons for urging this step are that it takes the whole scientific corps of the Department of Agriculture out of politics. It gives permanence and unity to the work, coordinating the several parts into one harmonious whole. It promotes economic management and promises the best results.

Respectfully,

WM. R. SESSIONS, *Secretary.*

Hon. REDFIELD PROCTOR,
Senate Chamber, Washington, D. C.

MASSACHUSETTS HORTICULTURAL SOCIETY,
Boston, February 20, 1896.

MY DEAR SIR: My attention having been called to the recommendation of the honorable Secretary of Agriculture that the Committees on Agriculture insert a clause after line 11, page 1, H. R. 5161, to give a director-in-chief of scientific bureaus, etc., salary \$6,000, I have the honor to express an approval of the plan to have such director.

I am, yours, very respectfully,

FRANCIS H. APPLETON, A. M.,
President Massachusetts Horticultural Society, etc.

Hon. REDFIELD PROCTOR.

STATE OF CONNECTICUT, BOARD OF AGRICULTURE,
West Cornwall, February 24, 1896.

MY DEAR SIR: I have received from President Goodell a copy of the communication from the Secretary of Agriculture in regard to the appointment of a director-in-chief of scientific bureaus and investigations.

The plan meets my hearty approval. The reasons for it are obvious, and I hope it will be secured by your favorable consideration.

Yours, very respectfully,

T. S. GOLD, *Secretary.*

Hon. REDFIELD PROCTOR.

CONNECTICUT DAIRYMEN'S ASSOCIATION,
OFFICE OF THE SECRETARY,
Putnam, Conn., February 24, 1896.

DEAR SIR: I have with considerable interest noticed the effort which is being made to provide for and appoint a director-in-chief of scientific divisions in the Department of Agriculture.

Believing the work of such an office would be productive of much good to the agricultural interests of our country, I assure you that what support you may give to it will be a favor to us.

Respectfully, yours,

W. I. BARTHOLOMEW, *Secretary.*

Hon. REDFIELD PROCTOR,
United States Senate.

MAINE STATE JERSEY CATTLE ASSOCIATION,
 SECRETARY'S OFFICE,
Winthrop, Me., February 20, 1896.

DEAR SIR: I beg leave to state that I heartily approve of Secretary Morton's recommendation relating to the appointment of a director-in-chief of scientific bureaus of investigation. In making this statement I think I voice the popular sentiment of all intelligent agriculturists of all sections of our country.

I think in giving this matter your careful consideration the advantages to be derived from the contemplated measure will readily suggest themselves to your mind; hence I will refrain from making any argument in favor of the measure.

Very truly, yours,

N. R. PIKE.

Hon. REDFIELD PROCTOR,
United States Senate.

NEBRASKA STATE BOARD OF AGRICULTURE,
Brownville, Nebr., March 9, 1896.

DEAR SIR: At a meeting of the board of managers Nebraska State board of agriculture, held at Omaha March 3, 1896, the inclosed preamble and resolutions were unanimously adopted, and a copy thereof directed to be furnished you asking favorable consideration.

Trusting Congress will by enactment approve the proposition of the Honorable Secretary of Agriculture, I am, sir,

Yours, respectfully,

ROBT. W. FURNAS, *Secretary.*

Hon. REDFIELD PROCTOR,
United States Senate, Washington City, D. C

Whereas the work of the Department of Agriculture in the discovery, exploration, development, conservation, and proper utilization of the resources of our country is of the utmost importance: and whereas the Department's capacity for originating, procuring, and disseminating knowledge of vital importance to farming and other interests, though already large, is capable of much extension in the future; and whereas the results accomplished through the system now in existence have been exceedingly great, and the one thing above all others necessary to increase the efficiency of this organization is a permanent policy with regard to its work and personnel:

Resolved, That the Nebraska State board of agriculture heartily approves the proposition to create the office of director-in-chief of scientific divisions in the Department of Agriculture, to be filled by a broadly educated and experienced scientific administrative officer, holding office during good behavior.

Resolved, That the plan of having a permanent officer in charge of the scientific and technical work under the executive head of a Department represents a distinct advance in good government, and is therefore not only of national importance, but, if carried out, certain to have a beneficial effect upon the scientific standing of Government work in all its relations.

ROBT. W. FURNAS, *Secretary.*

PUNTA GORDA, FLA., *February 24, 1896.*

MY DEAR MR. GOODE: Your favor of the 15th has reached me here.
 * * * I think a director of the scientific work of the Department of Agriculture would be of great public advantage. But I do not

think he should hold office "during good behavior." An inadequate man could hardly be gotten rid of in such a case. The officer should be appointed by the President, by and with the advice and consent of the Senate, to hold office either during the pleasure of the President or else for say six years, and in that case removable for inability or misconduct, on written accusation and hearing. You can make such use of this note as you think proper.

Very truly, yours,

GEO. F. EDMUNDS.

Prof. G. BROWN GOODE,
Washington, D. C.

NEW YORK CITY, *February 13, 1896.*

MY DEAR SENATOR PROCTOR: I am very anxious to do anything I can to help the passage of that amendment to the bill making appropriation for the Department of Agriculture, proposed by the Secretary of Agriculture, which provides for a director-in-chief of the scientific bureaus, to serve during good behavior.

I have long been much interested in the scientific work of our Government. It has been done in a manner that reflects credit upon the whole nation; but it should be given more continuity than it has had in the past, and it should be taken absolutely out of the domain of politics. In those scientific bureaus politics should not enter. It would be an excellent thing for the Government if in these scientific bureaus we could have continuity of work from Administration to Administration; and it seems to me that it could be given by the appointment of a scientific under-secretary. The value of the work would be very greatly enhanced and we would gradually develop at Washington a corps of scientists whose equal would be found in no capital of the civilized world. We could not get a first-class scientific man to take the place if he thought it would be changed with each Administration.

I earnestly hope you may see your way clear to support the measure, as it is one in which a large number of scientific men and of educated men interested in scientific matters all over the country take a great interest. It seems to me a matter of prime importance.

Sincerely, yours,

THEODORE ROOSEVELT.

Hon. REDFIELD PROCTOR,
Senate Chamber, Washington, D. C.

UNITED STATES NATIONAL MUSEUM,
Washington City, February 21, 1896.

SIR: I have read with great interest your letter to the committees on Agriculture of the United States Senate and House of Representatives recommending the appointment of a director-in-chief of scientific divisions of the Department of Agriculture, and I most heartily approve every word of it.

Although I now have no official connection I have held official positions in scientific work thirty years continuously, most of it in con-

nection with the work of the General Government at Washington, and I do not hesitate to say that there is pressing need of just such provision for official management as you recommend.

Very respectfully,

CHARLES A. WHITE,

Member of the National Academy of Sciences.

The Honorable SECRETARY OF AGRICULTURE.

OFFICE OF THE BOARD OF HEALTH,

Detroit, March 7, 1896.

MY DEAR SIR: Your printed reports from the Joint Commission of Scientific Societies relative to the appointment of a director-in-chief of the scientific divisions of the Department of Agriculture meets my approbation.

Good and lasting work can thus be accomplished and advances made which would not otherwise have been accomplished.

Yours, truly,

SAMUEL P. DUFFIELD,

Ph. D., M. D., Health Officer.

Hon. J. STERLING MORTON,

Secretary of the United States Department of Agriculture.

[From Science, Vol. III, No. 60, February 21, 1896, pp. 278, 279.]

An amendment to the Agricultural appropriation bill has just been sent to Congress providing for a "director-in-chief of scientific bureaus and investigations, to serve during good behavior, to have authority to act as Assistant Secretary, and to perform such other duties as the Secretary may direct."

This amendment, which has received the indorsement of the Secretary and Assistant Secretary of Agriculture, is the outgrowth of an effort to secure a permanent nonpolitical organization and administration of the various bureaus and divisions engaged in the scientific work of the Government, and at the same time bring about a more intelligent and more effective cooperation than has been heretofore possible.

The chief promoters of this movement are well-known public-spirited educators and men of science entirely outside of the Government service.

The Department of Agriculture as at present organized comprises a large number of scientific and administrative divisions, having for their object the discovery, exploration, and development of the agricultural and other natural resources of the country. The scientific divisions are engaged in researches requiring the highest technical skill, and some of them in the solutions of problems requiring long years of preparation and scientific training.

Excluding the Weather Bureau, no less than eight divisions are doing work which in the main is purely scientific, and each of these has its independent laboratory or laboratories. Including the Weather Bureau and the meat-inspection service of the Bureau of Animal Industry, 993 of a total of 2,019 employees are engaged chiefly upon scientific and technical subjects, and \$1,700,000 of the \$2,400,000 appropriated for the Department of Agriculture is expended upon this work. But the

greater part of the work of the Weather Bureau and Bureau of Animal Industry, while fundamentally scientific in method and character, is not in the line of original investigation, and therefore may be omitted in the present statement. Still, each of these Bureaus conducts at Washington certain investigations in pure science, the cost of which, added to that of the eight scientific divisions already mentioned, amounts annually to nearly half a million dollars. Nevertheless, no cooperative organization or classification of these scientific divisions, except those of the Weather Bureau, has been as yet undertaken.

It would seem a simple business proposition, needing no argument, that this comprehensive and vastly important work, promoting, as it does, the development of almost every resource of our land and every industry of our people, and concerning the food and health of a large part of our population, should have a permanent, broadly educated, and experienced scientific head, free from the disquieting influence of politics.

The first, and in some respects the most difficult, step toward the accomplishment of this end was taken when Secretary Morton secured for the Department of Agriculture the protection of the civil service, thus putting an end to the terrors of political pressure in filling vacancies in the scientific divisions.

Should the amendment now before Congress become a law—and it is believed the friends of science and education throughout the land will give it their unqualified support—it is by no means improbable that other scientific bureaus of the Government will seek the protection and support provided thereby, and that in the near future we may boast a National Department of Agriculture and Science.

MILTON, MASS., *April 23, 1896.*

DEAR SIR: At the last regular meeting of the Harvard Natural History Society the following resolutions were adopted:

Resolved, That this society has been deeply gratified to learn of the proposition of the Secretary of Agriculture for the appointment of a director-in-chief of the scientific research conducted by the Department of Agriculture, and that the society earnestly hopes that Congress may accord favorable consideration to the measure.

Resolved, That the Secretary be instructed to transmit a copy of these resolutions to each of the Senators from Massachusetts.

Very respectfully, yours,

WILLIAM L. W. FIELD,
Secretary Harvard Natural History Society.

Hon. HENRY CABOT LODGE,
Senate Chamber, Washington, D. C.

At a meeting of the Nuttall Ornithological Club, of Cambridge, Mass., held March 16, 1896, it was voted—

That the resolutions of the joint commission of the scientific societies of Washington advocating the creation of the office of "director in chief of scientific divisions in the Department of Agriculture" [a copy of which is annexed herewith] meet the hearty approval and receive the indorsement of this club as being in the interest of the proper advancement of science.

The secretary of the club is hereby instructed to send a copy of this vote to the Senators and Representatives from Massachusetts, thereby calling their attention to the proposed improvement in the workings of

the Department of Agriculture and the favor with which it is regarded by the Nuttall Ornithological Club, of Cambridge.

FRANCIS H. ALLEN, *Secretary.*

Whereas the work of the Department of Agriculture in the discovery, exploration, development, conservation, and proper utilization of the resources of our country is of the utmost importance; and

Whereas the Department's capacity for originating, procuring, and disseminating knowledge of vital importance to farming and other interests, though already large, is capable of much extension in the future; and

Whereas the results accomplished through the system now in existence have been exceedingly great, and the one thing above all others necessary to increase the efficiency of this organization is a permanent policy with regard to its work and personnel:

Resolved, That the joint commission of the scientific societies of Washington, composed of the officers of the several scientific societies of the city, comprising in all a membership of nearly 2,000, heartily approves the proposition to create the office of "director-in-chief of scientific divisions in the Department of Agriculture," to be filled by a broadly educated and experienced scientific administrative officer, holding office during good behavior.

Resolved, That the plan of having a permanent officer in charge of the scientific and technical work under the executive head of a Department represents a distinct advance in good government, and is therefore not only of national importance, but certain to have a beneficial effect upon the scientific standing of Government work in all its relations.

Adopted by the joint commission February 25, 1896.

THE GEOGRAPHICAL SOCIETY OF THE PACIFIC,
San Francisco, April 17, 1896.

J. STANLEY BROWN,

Secretary Joint Commission of the Scientific Societies:

The council of the Geographical Society of the Pacific considered, at a meeting held yesterday, your letter of the 7th March, covering preamble and resolutions approving the proposition of the joint commission to create the office of "director-in-chief of scientific divisions in the Department of Agriculture," for which the Honorable Secretary of Agriculture has asked an appropriation of \$6,000.

This council is in full accord with the views of the joint commission and of the eminent men who have indorsed it, and hereby indorses preamble and resolutions, with the addition to the end of the first resolution of the words "and an efficient discharge of his duties.

By order of the council.

Very respectfully,

GEO. DAVIDSON,
C. L. TAYLOR,
JOHN DOLBEER,
Committee.

NEW YORK MICROSCOPICAL SOCIETY,
New York, April 18, 1896.

DEAR SIR: The following action was taken by the New York Microscopical Society:

Resolved, That the New York Microscopical Society heartily approves the proposition to create the office of "director-in-chief of scientific divisions in the United States Department of Agriculture."

Adopted by the society April 17, 1896.

J. L. ZABRISKIE,
Corresponding Secretary.

MR. J. STANLEY BROWN,
Secretary Joint Commission.

MILTON, MASS., *April 23, 1896.*

DEAR SIR: I write to inform you that the following resolutions were adopted at the last regular meeting of the Harvard Natural History Society, and that I have carried out the instructions contained therein:

Resolved, That this society has been deeply gratified to learn of the proposition of the Secretary of Agriculture for the appointment of a director-in-chief of the scientific research conducted by the Department of Agriculture, and that the society earnestly hopes that Congress may accord favorable consideration to the measure.

Resolved, That the secretary be instructed to transmit a copy of these resolutions to each of the Senators from Massachusetts.

Very respectfully, yours,

WILLIAM L. W. FRIED,
Secretary Harvard Natural History Society.

J. STANLEY BROWN, Esq.,
*Secretary of the Joint Commission of the Scientific
Societies of Washington, D. C.*

BOSTON SOCIETY OF NATURAL HISTORY,
BERKELEY STREET,
Boston, Mass., April 27, 1896.

DEAR SIR: At the last meeting of the council of the Boston Society of Natural History it voted to indorse the action of the joint commission of the scientific societies of Washington in advocating the creation of a director-in-chief of scientific divisions in the Department of Agriculture.

Yours, truly,

SAM'L HENSHAW,
Secretary.

Mr. J. STANLEY BROWN.

MESILLA PARK, N. MEX., *April 16, 1896.*

We, the undersigned, members of the New Mexico Station Council, desire to express our most hearty approval of the proposals of the Secretary of Agriculture for the appointment of a permanent head of the scientific bureaus of the Department. It is of the utmost importance to the experiment stations that the scientific work at Washington should be carried on without hindrance or material change of policy from year to year; so that while the stations themselves may, under the conditions at present existing, have to undergo detrimental changes, there may be at least a central office where the continuity and high standard of the scientific work is assured.

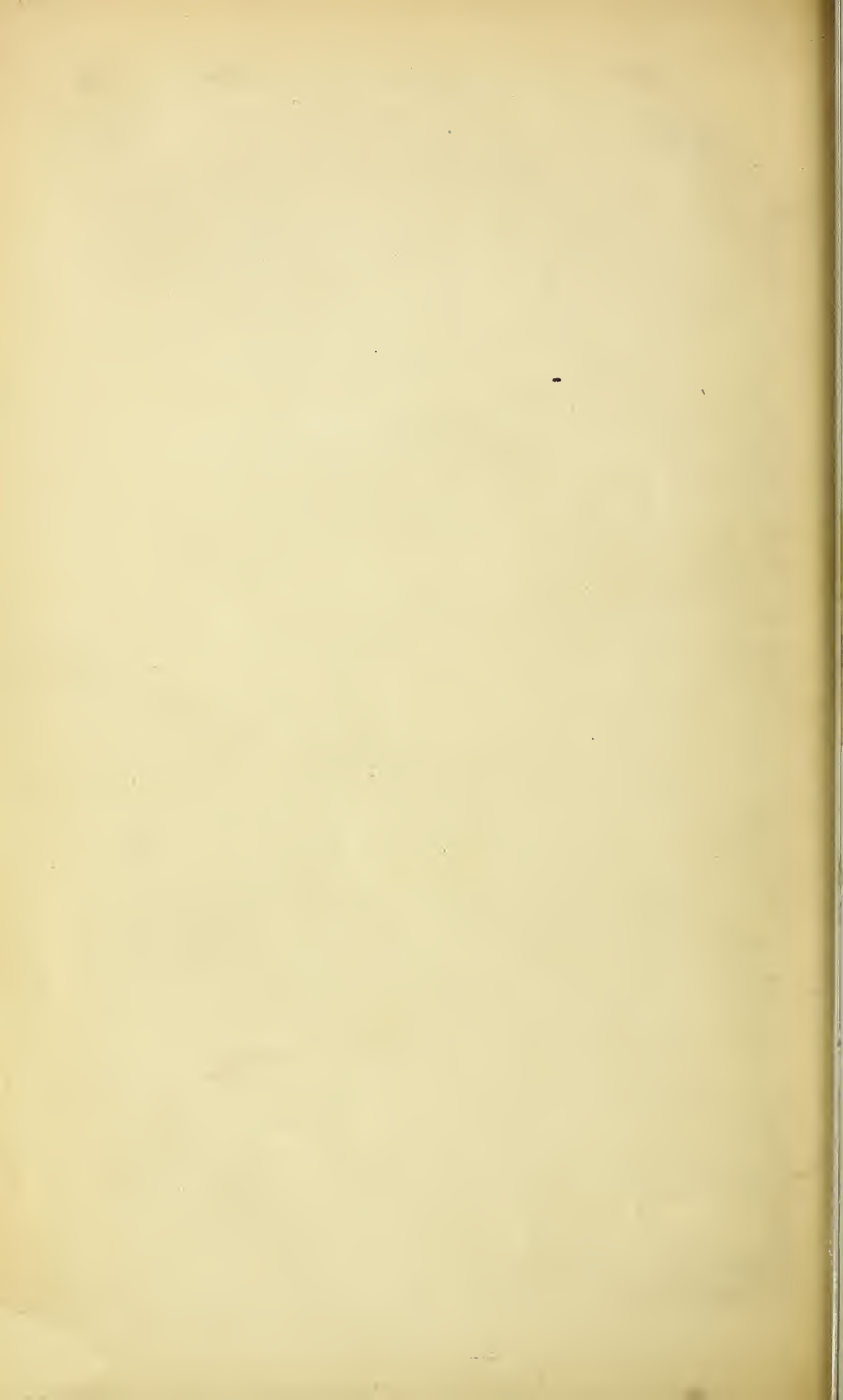
S. P. MCCREA,
Director.

ARTHUR GOSS,
Chemist and Vice-Director.

GEORGE VESTAL,
Agriculturist and Horticulturist.

T. D. A. COCKERELL,
Entomologist.

E. O. WOOTON,
Botanist.



DIRECTOR IN CHIEF OF SCIENTIFIC BUREAUS AND
INVESTIGATIONS.

LETTER

FROM

THE ACTING SECRETARY OF THE TREASURY,

TRANSMITTING

A communication from the Secretary of Agriculture relating to an appropriation for a director in chief of scientific bureaus and investigations.

FEBRUARY 15, 1896.—Referred to the Committee on Agriculture and ordered to be printed.

TREASURY DEPARTMENT,
February 14, 1896.

SIR: I have the honor to transmit herewith for the consideration of Congress copy of a communication from the Secretary of Agriculture of the 12th instant, and its inclosure, submitting an amendment to the bill making appropriations for the Department of Agriculture for the fiscal year ending June 30, 1897, providing for a director in chief of the scientific bureaus and investigations, at a salary of \$6,000 per annum.

Respectfully, yours,

S. WIKE, *Acting Secretary.*

The SPEAKER OF THE HOUSE OF REPRESENTATIVES.

UNITED STATES DEPARTMENT OF AGRICULTURE,
OFFICE OF THE SECRETARY,
Washington, D. C., February 12, 1896.

SIR: I hand you herewith a copy of a letter to the chairmen of the appropriate committees of the Senate and House of Representatives, requesting them to make an amendment to the bill making appropriation for the Department of Agriculture for the fiscal year ending June 30, 1897, providing for a director in chief of scientific bureaus and investigations. I respectfully request that you cause this additional item to be properly rendered as a part of the estimates of the Department of Agriculture for the next fiscal year and transmitted in due form to Congress at the earliest practicable moment.

Very respectfully,

J. STERLING MORTON, *Secretary.*

The SECRETARY OF THE TREASURY.

UNITED STATES DEPARTMENT OF AGRICULTURE,
OFFICE OF THE SECRETARY,
Washington, D. C., February, 11, 1896.

The Chairmen Committee on Agriculture, United States House of Representatives, and Committee on Appropriations, United States Senate.

SIR: After mature deliberation and conference with gentlemen who have made the scientific work of this Department a special study, I am convinced that it is my duty to ask Congress to provide in the pending appropriation bill for a director in chief of scientific divisions, who shall be charged with the supervision of the very important, comprehensive, and constantly growing scientific work done in the Department of Agriculture.

The Department of Agriculture has for its object the discovery, exploration, development, conservation, and proper utilization of the agricultural and other natural resources of our country. This is accomplished through various agencies, which are classified as either purely scientific or technical, or simply business, administrative, or educational agencies. These agencies are organized in the Department under two large bureaus and a number of divisions and offices.

The Weather Bureau includes 3 executive or business offices, 6 technical divisions, and 5 scientific experts engaged in research, besides 154 technical observing stations and 54 principal signal stations along the coast and on the Great Lakes. The Bureau of Animal Industry includes 2 administrative offices, 152 technical stations or agencies engaged in meat inspection, quarantine work, etc., and 3 laboratories for scientific investigations. Of the remaining divisions in the Department 7 are engaged in administrative business, publishing and distributing information, and educating the people; 8 are classed as technical, and 7 are chiefly engaged in purely scientific investigations or surveys of the country's resources. For the details of the organization of the Department and the duties of these bureaus and divisions, you are referred to the accompanying table.

An analysis of the last act shows that of the \$2,400,000 appropriated for the Department of Agriculture over \$1,700,000, or over 70 per cent. was given for this scientific and technical work, as distinguished from the administrative or general work of this institution. A canvass of the rolls of the Department shows that 993 out of a total of 2,019 employes are engaged chiefly upon scientific and technical work.

It would seem a simple business proposition, needing no argument to support it, that the vastly important and comprehensive work described in the law, promoting, as it does, the development of almost every resource of our land and every industry of our people, our production at home and our markets abroad, and concerning even the food and health of a large part of our population, for which \$1,700,000 are annually expended, and in which nearly 1,000 scientific and technical experts are engaged, should have a permanent, broadly educated, and experienced scientific director or superintendent.

No permanent and adequate direction and supervision is provided in the present organization of the Department. It is not to be supposed that the Secretary of Agriculture, a member of the President's Cabinet, even if a farmer and an experienced executive, will always be a technically trained scientific man. Even if he should be, he occupies the position only four years, and thus scarcely becomes familiar with the difficult and complex work of the Department before he leaves it. The Assistant Secretary of Agriculture is subject to the same conditions. Because he must represent the Secretary in the Administration, he must

go with the Administration. These conditions, which are necessary and inherent in our system of Government, it is not proposed to change. A Secretary and an Assistant Secretary are both needed. But another permanent officer is needed to direct the work of the various scientific bureaus of the Department, under the general authority of the Secretary.

In order to accomplish the best and most permanent results, this Department must have a permanent policy with regard to all its scientific work. This Department has less relation to the general executive business of the Government and less connection with what is usually called "politics" than any other Department of the Government. In fact, the scientific work of the great bureaus, divisions, and surveys above referred to should be kept free from politics to be efficient and impartial to the interests of all. The numerous bureaus and divisions do not have under the present organization—in fact, can not have—the attention and direction which the interests involved demand. With the change of Administration the Department is practically headless, and, to a great extent, helpless, until the new Secretaries have had time to master the details of its technical work. Such a director of scientific division is needed therefore, if for nothing else, to carry on the scientific work of the Department from one Administration to the next.

Is it conceivable that any great manufacturing, railroad, or mining company undertaking such difficult scientific work and using so much money and so many men would provide for it no permanent scientific direction or supervision whatever, and then change all the heads every four years, leaving the work practically at a standstill; or, what is worse, entirely without direction or supervision from six months to a year in every four? The change of Administration affects the work of this Department even more than it does that of others, because its work is less of a routine character, is more progressive, and thus requires constant direction to keep it usefully going. The bureaus and divisions of this Department can not do practically the same thing year after year, as they do in the great business Departments of the Government, but must, if they serve the people properly, do a new and different thing almost every month in every year. They therefore need constant assistance and supervision from a general executive much more than do the divisions of other Departments.

Aside from these special considerations with regard to the scientific work, the Department of Agriculture greatly needs another general executive officer. It has only two Secretaries authorized to take any official action. There is no provision in the laws for any officer of the Department to act in case of the absence of the two Secretaries, as there is in some of the other Departments. Either the Secretary or the Assistant Secretary has to be present at the Department every day and every official hour during the year.

The bureaus and divisions in Washington are, contrary to the popular idea, much the smaller part of the Department of Agriculture. Outside of Washington there are 154 observing stations and 52 signal stations of the Weather Bureau. There are 100 meat-inspection stations in 40 different cities and towns in the country; 21 different quarantine stations for import cattle at points on the coast and on the Canadian and Mexican boundaries; 9 different stations for inspecting export stock, and 19 for inspecting stock for Texas fever, making a total of about 150 stations in the Bureau of Animal Industry, which should have inspection and supervision occasionally by the highest authority of the Department. The agricultural experiment stations, located in different

States and Territories, and several special experiment stations of the Department of Agriculture, are supposed to receive the supervision of the Department. In addition to these agencies, the Department has many others for studying soils, foods, and food dietaries, testing timbers, and collecting material illustrating our natural resources scattered all over the country. The Secretaries or directors should be in position to visit and examine the work of these various agencies for the purpose of informing themselves as to their uses and needs, in view of the great amount of business done and of the large number of branches of the Department scattered all over the country.

Another executive officer is greatly needed in order to permit a better distribution of work and a more regular and thorough supervision of the outlined branches of the Department. The new officer here asked for should therefore be authorized to act, when called upon by the Secretary, as a Second Assistant Secretary.

The salary attached to the position should be sufficient to secure the services of a broadly educated scientific man who has had the necessary experience in the administration of affairs and the direction of scientific work, and should be equal to that paid for similar services in other branches of the Government.

I therefore respectfully recommend that you insert after line 11, page 1, of the bill making appropriation for the Department of Agriculture for the fiscal year ending June 30, 1897 (H. R. 5161), the words:

Director in chief of scientific bureaus and investigations, to serve during good behavior, to have the authority to act as Assistant Secretary, and to perform such other duties as the Secretary may direct, six thousand dollars.

Respectfully submitted.

J. STERLING MORTON, *Secretary*

○

